

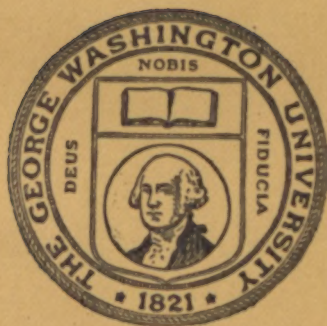
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CONTENTS

"SEEK THE TRUTH WITHOUT PREJUDICE
SPEAK THE TRUTH WITHOUT FEAR."

George Washington University
BULLETIN

CATALOGUE NUMBER

APRIL, 1920

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PART I
GENERAL

PART I
GENERAL

1920							1921													
JULY							JANUARY							JULY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	..	1	..	..	..	..	..	1	2
4	5	6	7	8	9	10	2	3	4	5	6	7	8	3	4	5	6	7	8	9
11	12	13	14	15	16	17	9	10	11	12	13	14	15	10	11	12	13	14	15	16
18	19	20	21	22	23	24	16	17	18	19	20	21	22	17	18	19	20	21	22	23
25	26	27	28	29	30	31	23	24	25	26	27	28	29	24	25	26	27	28	29	30
..	..	..	..	..	..	..	30	31	..	..	..	..	..	31	..	..	..	..	..	..
AUGUST							FEBRUARY							AUGUST						
1	2	3	4	5	6	7	..	..	1	2	3	4	5	..	1	2	3	4	5	6
8	9	10	11	12	13	14	6	7	8	9	10	11	12	7	8	9	10	11	12	13
15	16	17	18	19	20	21	13	14	15	16	17	18	19	14	15	16	17	18	19	20
22	23	24	25	26	27	28	20	21	22	23	24	25	26	21	22	23	24	25	26	27
29	30	31	..	..	..	..	27	28	..	..	..	..	..	28	29	30	31	..	..	..
SEPTEMBER							MARCH							SEPTEMBER						
..	..	..	1	2	3	4	..	..	1	2	3	4	5	..	..	..	..	1	2	3
5	6	7	8	9	10	11	6	7	8	9	10	11	12	4	5	6	7	8	9	10
12	13	14	15	16	17	18	13	14	15	16	17	18	19	11	12	13	14	15	16	17
19	20	21	22	23	24	25	20	21	22	23	24	25	26	18	19	20	21	22	23	24
26	27	28	29	30	..	..	27	28	29	30	31	..	..	25	26	27	28	29	30	..
OCTOBER							APRIL							OCTOBER						
..	..	..	..	1	2	..	..	..	..	..	..	1	2	..	..	..	..	..	1	..
3	4	5	6	7	8	9	3	4	5	6	7	8	9	2	3	4	5	6	7	8
10	11	12	13	14	15	16	10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	17	18	19	20	21	22	23	16	17	18	19	20	21	22
24	25	26	27	28	29	30	24	25	26	27	28	29	30	23	24	25	26	27	28	29
31	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..
NOVEMBER							MAY							NOVEMBER						
..	1	2	3	4	5	6	1	2	3	4	5	6	7	..	..	1	2	3	4	5
7	8	9	10	11	12	13	8	9	10	11	12	13	14	6	7	8	9	10	11	12
14	15	16	17	18	19	20	15	16	17	18	19	20	21	13	14	15	16	17	18	19
21	22	23	24	25	26	27	22	23	24	25	26	27	28	20	21	22	23	24	25	26
28	29	30	..	..	..	..	29	30	31	..	..	..	..	27	28	29	30	..	..	..
DECEMBER							JUNE							DECEMBER						
..	..	..	1	2	3	4	..	..	..	1	2	3	4	..	..	..	..	1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	4	5	6	7	8	9	10
12	13	14	15	16	17	18	12	13	14	15	16	17	18	11	12	13	14	15	16	17
19	20	21	22	23	24	25	19	20	21	22	23	24	25	18	19	20	21	22	23	24
26	27	28	29	30	31	..	26	27	28	29	30	..	..	25	26	27	28	29	30	31

UNIVERSITY CALENDAR

1920

February	2	<i>Monday.</i> —Second half-year begins.
February	22	<i>Sunday.</i> —Winter Convocation Sermon.
February	23	<i>Monday.</i> —Winter Convocation. A holiday in all Departments of the University.
April	2-5	<i>Friday to Monday</i> , both inclusive.—Easter Holidays.
April	11	<i>Tuesday.</i> —Davis Prize Speaking.
April	19	<i>Monday.</i> —Last day on which theses of candidates for the Doctorate degree at the Commencement may be presented.
May	17	<i>Monday.</i> —Last day on which theses of candidates for the Engineering and Master's degrees at the Commencement may be presented.
May	20	<i>Thursday.</i> —Final examinations, Department of Arts and Sciences begin.
May	25	<i>Tuesday.</i> —Doctorate Disputation.
May	30	<i>Sunday.</i> —Baccalaureate Sermon.
May	31	<i>Monday.</i> —Commencement.
June	17-30	Registration for the Summer School.
June	21	<i>Monday.</i> —Instruction begins in the three-credit courses coming at 7.45 A. M., and in all afternoon classes.
June	28	<i>Monday.</i> —Instruction begins in the two-credit course coming in the forenoon.
September	29	<i>Wednesday.</i> —Academic year begins in all departments of the University.
October	12	<i>Tuesday.</i> —Last day on which theses of candidates for Engineering and Master's degrees at the Fall Convocation may be presented.
October	13	<i>Wednesday.</i> —Stated meeting of the Board of Trustees.
October	28	<i>Thursday.</i> —Fall Convocation.
November	25-27	<i>Thursday to Saturday</i> , both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 24, 1920 TO JANUARY 2, 1921,

BOTH INCLUSIVE

1921

January	7	<i>Friday.</i> —Last day on which theses of candidates for the Doctorate degree at the Winter Convocation may be presented.
January	12	<i>Wednesday.</i> —Stated meeting of the Board of Trustees.
January	24	<i>Monday.</i> —Midyear examinations in the Department of Arts and Sciences begin.
January	31	<i>Monday.</i> —Last day on which theses of candidates for the Engineering and Master's degrees at the Winter Convocation may be presented.

UNIVERSITY CALENDAR

9

January	31	<i>Monday.</i> —Second half-year begins.
February	15	<i>Tuesday.</i> —Doctorate Disputation.
February	20	<i>Sunday.</i> —Winter Convocation Sermon.
February	22	<i>Tuesday.</i> —Winter Convocation. A holiday in all departments of the University.
March	4	<i>Friday.</i> —Inauguration Day. Holiday in all departments of the University.
March	25-28	<i>Friday to Monday,</i> both inclusive.—Easter Holidays.
April	6	<i>Tuesday.</i> —Davis Prize Speaking.
April	25	<i>Monday.</i> —Last day on which theses of candidates for the Doctorate degree at the Commencement may be presented.
May	23	<i>Monday.</i> —Last day on which theses of candidates for the Engineering and Master's degrees at the Commencement may be presented.
May	25	<i>Wednesday.</i> —Final examinations, Department of Arts & Sciences begin.
May	31	<i>Tuesday.</i> —Doctorate Disputation.
June	1	<i>Wednesday.</i> —Annual meeting of the Board of Trustees.
June	5	<i>Sunday.</i> —Baccalaureate Sermon.
June	8	<i>Wednesday.</i> —Commencement.
June	16-25	Registration for the Summer School.
June	20	Summer School opens.

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JOHN B. LARNER

Vice-Chairman of the Board of Trustees

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Auditor: AMERICAN AUDIT COMPANY.

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The Secretary of the University, Secretary *ex officio*.

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Charles Wendell Holmes, Treasurer

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Alfred Frederick William Schmidt, A.M., Librarian

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Elmer Schatz, Superintendent

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 HENRY E. KALUSOWSKI, M. D., Phar.D.,... Dean of the Pharmacy School

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Admissions.—Professors HODGKINS, RUEDIGER, and WILBUR.
Commencement Exercises.—The President, Professors SWETT, ALDEN, the Secretary, and the Treasurer.
Schedule.—Professors HENNING, HODGKINS, and RUEDIGER.
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Summer School.—Professors RUEDIGER, HODGKINS, HUNTER, and VAN VLECK.
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HISTORY AND PRESENT ORGANIZATION

HISTORY

The George Washington University is the successor of the Columbian College in the District of Columbia which was chartered by an act of Congress approved February 9, 1821. In 1873 the name was changed to Columbian University and in 1904 to The George Washington University.

The first commencement of Columbian College was held on the 15th of December, 1824, with the President of the United States; the Honorable John Quincy Adams, Secretary of State; the Honorable John C. Calhoun, Secretary of War; the Honorable Henry Clay, Speaker of the House of Representatives; and General Lafayette among those present.

Work in the College was confined to the Arts and Sciences until March, 1825, when the Medical Department was established under the conduct of Dr. Thomas Sewall. The Medical Department is thus in the chronological order of establishment the seventeenth medical school in the United States. In 1826 the Law Department was founded with the Honorable William T. Carroll and Mr. Justice Cranch as its professors. Shortly afterward the school was discontinued, but was reopened in 1865. A Theological School founded also in 1826 was soon moved to Newton, Mass., where it now flourishes. On October 1, 1884, the Corcoran Scientific School, now the College of Engineering, was founded. Under Dean Charles E. Munroe the School of Graduate Studies was organized in 1893. The Dental School which had as its nucleus a course of lectures begun in November 1887, will be temporarily discontinued by action of the Board of Trustees after June 1, 1920. Teachers College was started as The Division of Education in 1907. In 1919, the National College of Pharmacy, organized in 1905 as an affiliated college of the University and suspending during the last year of the war, was reopened as the School of Pharmacy, a division of the Department of Medicine, Dentistry and Pharmacy.

EDUCATIONAL ORGANIZATION

Department of Arts and Sciences

School of Graduate Studies

Columbian College

College of Engineering

Teachers College

Department of Medicine, Dentistry and Pharmacy

The Medical School

The Dental School

The School of Pharmacy

ANNUAL COMMENCEMENT

The Annual Commencement is held thirty-six weeks after the last Wednesday in September. Students who have satisfied the requirements for degrees subsequent to the June Commencement may be awarded degrees at the Fall Convocation on October 28.

The Winter Convocation is held on February 22.

UNIVERSITY ASSEMBLIES

University Assemblies will be held from time to time, the attendance of students upon which may be required.

SPECIAL UNIVERSITY LECTURES

In accord with the University's desire to provide some extension courses that will appeal to the public and especially to persons desiring to take special courses in Arts or Letters, a course of eight lectures has been arranged for the year 1920-21. The lectures will be delivered by Langdon E. Mitchell, Litt. D., and will deal principally with poetry. The lectures will be held during the first half of the second semester, most of them during the Lenten Season. Members of the public desiring to attend may obtain tickets of admission at a fee of six dollars at the office of the Recorder, Lisner Hall, 2023 G Street.

THE UNIVERSITY LIBRARY

The University Library comprises the Library of the Department of Arts and Sciences, the Law Library, and the Medical Library. It contains 55,000 volumes.

In addition to its general collections the Library of the Department of Arts and Sciences contains the Library of the late Professor Richard Heinzel, of the University of Vienna, containing 7,200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7,900 books and pamphlets in Greek and Roman literature, archeology, and history; the Mount Vernon Alcove containing 4,000 volumes in political history, international law, and the social sciences. Besides, the library of the American Institute of Architects, consisting of 1,063 volumes and portfolios of plates and drawings, is deposited in the reading room as a loan collection, where it is accessible, also, to all local architects. The library is open from 9 a. m., to 10.30 p. m.

The Law Library, containing 7,500 volumes, is open from 8.30 a. m. to 10 p. m.

The Medical Library, containing about 3,000 volumes, is open from 9 a. m. to 9 p. m.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory.

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ALLAN BOWYER MCDANIEL, B.S., ... Acting Professor of Civil Engineering

JOHN RAYMOND LAPHAM, M.S. in C.E. Professor of Civil Engineering

NEXIL MONROE HOPKINS, Ph.D. Assistant Professor of Chemistry

EDWIN ALLSTON HILL, Ph.D. Assistant Professor of Chemistry

LEVI RUSSELL ALDEN, A.M., LL.B. Assistant Professor of History

BEDFORD BROWN, S.B. Assistant Professor of Architecture

GEORGE MORTON CHURCHILL, Ph.D. Assistant Professor of History

EDWARD ROGERS NOYES, M.D. Assistant Professor of Chemistry

THOMAS BENJAMIN BROWN, Ph.D. Assistant Professor of Physics

CLARENCE CAMERON KOCHENDERFER, A.M.,

Assistant Professor of Commerce

HENRY GRATTAN DOYLE, A.M.,

Assistant Professor of Romance Languages

WILLIAM DARRACH HALSEY, A.B.,

Assistant Professor of Mechanical Engineering

LEONARD D. NORSWORTHY, C.E., A.M.,

Acting Assistant Professor of Civil Engineering

LOUIS EUGENE MCARTHUR, A.M. Assistant Professor of History

HARRY GRANT HODGKINS, A.B. Assistant Professor of Mathematics

ELMER LOUIS KAYSER, A.M.,

Secretary of the University and Assistant Professor of History

ROBERT WHITNEY BOLWELL, A.M. Assistant Professor of English

JOHN METCALF, Ph.D. Assistant Professor of Psychology

CHARLES HERBERT STOCKTON, LL.D. Lecturer on International Law

FREDERICK EUGENE FOWLE, Jr., S.B. Lecturer on Astro-Physics

WILLARD STANTON SMALL, Ph.D. Lecturer on Education

JULIA THECKLA MACMILLAN, S.M. Instructor in Zoology

CHARLES EDWIN VAN OSTRAND, S.M., Lecturer on Mathematical Physics

MARIETTA STOCKARD ALBION, A.B.,

Lecturer on the Teaching of Children's Literature

EDWARD CULLOM, A.M. Instructor in French

EDGAR LEE HEWETT, D.Soc. Lecturer on Archaeology

CECIL KNIGHT JONES, B.Litt.....	Instructor in Spanish
ALEXANDER WETMORE, M.S.....	Instructor in Zoology
HARRIET UNDERWOOD SYMONDS, A.M.....	Lecturer on Education
CHARLES ELMER RESSER, Ph.D.....	Instructor in Geology
WALDO LASALLE SCHMITT, S.B., A.M.....	Instructor in Zoology
GERTRUDE RICHARDSON BRIGHAM, Ph.D.,	
Instructor in Archaeology and History of Art	
EARL GORDON MARSH, C.E.....	Instructor in Civil Engineering
FRANK ALBERT WOODWARD, B.S. in M.E.....	Instructor in Drawing
XAVIER TEILLARD, B. ès L.....	Instructor in French
FRANK MCGINLEY PHILLIPS, Ph.D.....	Instructor in Statistics
JUAN B. SALDANA.....	Instructor in Spanish
LAWRENCE C. WOODMAN, A.B.....	Instructor in English
DANIEL A. CHACE, A.B.....	Instructor in Journalism
CLAY LUTHER JENNISON.....	Instructor in Naval Architecture
C. F. KRAMER, A.M.....	Instructor in French
JAMES C. CORLISS, A.B.....	Instructor in Romance Languages
JOSEPH HENRY WILSON, B.S. in M.E.....	Instructor in Mechanical Drawing
CLETUS H. KILLIAN.....	Instructor in Mechanical Engineering
WILLIAM L. CHENEY, B.S.....	Instructor in Physics
A. L. DIERSTEIN.....	Instructor in Applied Mathematics
JOSEPH B. RAWLINGS, B.S. in E.E.....	Instructor in Electrical Engineering
FRANK C. DANIEL, A.B.....	Instructor in Mathematics
H. LEFFLER, M.D.....	Instructor in Chemistry
GUS KILTON PATTISON, A.B.....	Instructor in Romance Languages
MERLE I. PROTZMAN, A.B.....	Instructor in Romance Languages
BENJAMIN C. CRUTKSHANKS, B.S. in M.E.,	
Instructor in Mechanical Engineering	
GEORGE W. PHILLIPS, B.S. in Chem.....	Instructor in Chemistry
HENRY ALBERT LEPPER, B.S. in Chem.....	Assistant in Chemistry
BONIFANT HAMILTON, B.S. in Chem.....	Assistant in Chemistry
J. NORMAN TAYLOR, B.S. in Chem.....	Assistant in Chemistry
PETER VALEAR, M.S.....	Assistant in Chemistry
ALICE J. WHITSON, B.S.....	Assistant in Chemistry
JAMES L. YOUNG, B.S. in Chem.....	Assistant in Chemistry
BEVERLY L. CLARKE.....	Student Assistant in Chemistry
DELMOUR J. FUQUA.....	Student Assistant in Chemistry
ALBERT L. GERHART.....	Student Assistant in Chemistry
SAMUEL R. KLINE.....	Student Assistant in Chemistry
ELMER H. KREHBIEL.....	Student Assistant in Chemistry
NORRIS H. SANBORN.....	Student Assistant in Chemistry
ALBERT A. SPEAR.....	Student Assistant in Chemistry
GORDON C. TIBBETTS.....	Student Assistant in Chemistry
PAUL C. VAN NATTA.....	Student Assistant in Chemistry
MEYER WEINSTEIN.....	Student Assistant in Chemistry

ALBERT J. FIFE.....	Student Assistant in Physics
CASPER L. COTTRELL.....	Student Assistant in Physics
GEORGE S. HASTINGS.....	Student Assistant in Physics
DARWIN J. POPE.....	Student Assistant in Physics
WILLIAM J. CHEYNEY.....	Student Assistant in History
NONA B. POLLNER.....	Student Assistant in Economics
WILLIAM HARRIS.....	Student Assistant in Architecture
VIRGIL BROOKS WILEY.....	Student Assistant in History
MAY BLANCHE EINSTEIN.....	Assistant in the Library
MILDRED J. MOORE.....	Assistant in the Library
RUTH FRANCES ALLEN.....	Assistant in the Library
JULIA Irene Daniels.....	Assistant in the Library
ALMA BARKER.....	Assistant in the Library
HANNAH LOUISE GARDNER DONK.....	Assistant in the Library
JOHN R. MASON.....	Assistant in the Library
RUTH FRANCES ALLEN.....	Student Assistant in English
JOHN AMAN.....	Student Assistant in English
ROBERT BOSWORTH.....	Student Assistant in English
JULIA IRENE DANIEL.....	Student Assistant in English
ETHEL JOHNSON.....	Student Assistant in English
QUINTER LYON.....	Student Assistant in English
HELEN MANKEY.....	Student Assistant in English
MARGARET METZEROTT.....	Student Assistant in English
AGNES NELSON.....	Student Assistant in English
HERBERT B. NICHOLS.....	Student Assistant in English
LILLIE M. PAYNE.....	Student Assistant in English
MARGARET PREINKERT.....	Student Assistant in English
ELIZABETH SCHAAP.....	Student Assistant in English
MIRIAM SELAH.....	Student Assistant in English
KATHERINE SYMONDS.....	Student Assistant in English
BEATRICE TAIT.....	Student Assistant in English
LELLA WARREN.....	Student Assistant in English
LYDIA WESTCOTT.....	Student Assistant in English

FACULTY OF THE SCHOOL OF GRADUATE STUDIES

President Collier, Dean Henning, Professors Hodgkins, Schoenfeld, Clarke, Wilbur, Swisher, Carroll, Bartsch, Henning, Hall, Franz, Smith, Ruediger, Schmidt, Moore, Humphreys, Richardson, Littlehales, Bassler, Kern, Croissant, Schapiro, Michelson, Pryor, C. E. Hill, Coutinho, Cohen, Erwin, Cushman, McNeil, Swett, Lapham. Assistant Professors Hopkins, E. A. Hill, Alden, Churchill, T. B. Brown, Kochenderfer, Doyle, Halsey, Kayser, Bolwell, Metcalf; Messrs. Small, Van Orstrand, Miss Brigham.

FACULTY OF COLUMBIAN COLLEGE

President Collier, Dean Wilbur, Professors Hodgkins, Schoenfeld, Swisher, Carroll, Bartsch, Henning, Bibb, Smith, Ruediger, Schmidt,

Richardson, Bassler, Kern, Croissant, Coutinho, Schapiro, C. E. Hill, McNeil, Erwin, Swett, Lapham; Assistant Professors E. A. Hill, Alden, Churchill, T. B. Brown, Kochenderfer, Doyle, Halsey, McArthur, Hodgkins, Bolwell, Metcalf, Kayser; Messrs. Cullom, Jones, Resser, Teillard, Cheney, Pattison, Protzman, Cruikshanks, Miss Macmillan, Miss Brigham.

FACULTY OF COLLEGE OF ENGINEERING

President Collier, Dean Hodgkins, Professors Schoenfeld, Wilbur, Henning, Bibb, Schmidt, Littlehales, Bassler, Harris, McNeil, Erwin, Swett, Lapham; Assistant Professors Alden, Brown, T. B. Brown, Doyle, Halsey, Norsworthy, H. G. Hodgkins; Messrs. Cullom, Resser, March, Cheney, Pattison, Protzman, Cruikshanks.

FACULTY OF TEACHERS' COLLEGE

President Collier, Dean Ruediger, Professors Hodgkins, Schoenfeld, Wilbur, Swisher, Bartsch, Henning, Smith, Schmidt, Richardson, Bibb, Bassler, Kern, Croissant, C. E. Hill, McNeil, Erwin, Swett; Assistant Professors Alden, T. B. Brown, Kochenderfer, Doyle, McArthur, Kayser, Bolwell, Metcalf; Messrs. Small, Cheney, Pattison, Protzman; Mrs. Albion, Mrs. Symonds,

SCHOOL OF GRADUATE STUDIES

HIGHER DEGREES

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A. M.), Master of Science (S. M.), Civil Engineer (C. E.), Electrical Engineer (E. E.), Mechanical Engineer (M. E.), and Doctor of Philosophy (Ph. D.).

ADMISSION

Candidates for admission to courses for higher degrees must make application to the Dean of the School of Graduate Studies on application blanks, which may be obtained of him. Candidates must present certificates of the degrees they hold from the institutions conferring such degrees. Candidates requesting advanced standing must present detailed certificates of the work for which they ask credit.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the course of study pursued must have been such as to qualify the candidate for pursuing the subjects chosen for the Master's or other higher degree sought. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to specialize in their work. Such candidates are required to complete one major and two minor subjects selected from properly correlated and approved University subjects amounting to twenty-four semester-hours, and to present a satisfactory thesis, which shall count for six semester-hours. One of the minor topics may be selected from the University subject which includes the major topic. The major topic shall cover not less than fifteen nor more than eighteen semester-hours, including the thesis, a minor topic, not less than six or more than nine.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete a course of study amounting to not less than thirty semester-hours of work distributed among three approved University subjects, of which not more than eighteen semester-hours, including the thesis, shall be given to any one subject. The candidate must also present a thesis in the field to which the major subject belongs, which shall count for six of the required thirty credits.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done in satisfaction of the requirements for the Bachelor's degree shall be counted again for a higher degree. Under no circumstances may courses in the First Section, "Primarily for undergraduates," be counted towards any higher degree, though a graduate student may be allowed to take them without receiving academic credit.

Advanced work done elsewhere may be credited toward the Master's degree in this University, to the extent of not more than twelve semester-hours. No work, whether done here or at other institutions, will be credited toward the Master's degree unless the student attains at least grade "C" or its equivalent on such work.

Work for which the Master's degree has been awarded may be credited as one year of work toward the degree of Doctor of Philosophy, provided that it be in the same field of work.

HIGHER DEGREES IN ENGINEERING

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one year of residence at this University. He shall satisfactorily complete approved courses aggregating not less than thirty semester-hours, of which a thesis shall count six.

Advanced work done elsewhere may be credited toward a degree in Engineering in this University, to the extent of not more than twelve semester-hours. No work, whether done here or at other institutions, will be credited toward the Master's degree unless the student attains at least grade "C" or its equivalent on such work.

DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in university subjects for a period of not less than three years, has engaged in research under university auspices, has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for this degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for his graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but at least one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University subjects—one major and two collateral minor studies, one of which minors may be in the subject which includes the major topic. These must be pursued under the guidance of a committee consisting of the professors in charge of the University subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics. Before the Doctor's degree is conferred, the candidate shall have pursued his major subject at least three years and each minor at least two years since he obtained his baccalaureate degree. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Professors of French and German, not more than one month after the opening of his final year, that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a thesis upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

CANDIDATE'S COMMITTEE

The professors and other university officers offering the topics in which a candidate must qualify for his degree and to whom he is assigned constitute the Committee that must pass upon his work. The officer directing the major topic is chairman.

EXAMINATIONS

Candidates must pass examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the direction of the examiner. The final examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to

warrant such an examination being taken. If a candidate has satisfactorily passed his final examination, he may be permitted to complete his thesis away from the University.

DEFENSE OF THE THESIS

Before a candidate shall be recommended to the Board of Trustees for the degree of Doctor of Philosophy he must have successfully defended his thesis in public before a Board of Experts not officially connected with the University. Before the candidate shall be permitted to undertake the defense of his thesis, the thesis must have been favorably reported on and recommended for defense by the professor having supervision over the candidate's major topic, and by a co-referee appointed from the Faculty of Graduate Studies.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Applied Mathematics, Archaeology, Anatomy, Architecture, Astronomy, Astro-Physics, Bacteriology, Botany, Chemistry, Civil Engineering, Commerce, Economics, Education, Electrical Engineering, Ethnology, French, Embryology, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Gynecology, Histology, Hydraulic Engineering, History, History of Art, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Mechanical Engineering, Meteorology, Microscopy, Nautical Science, Paleontology, Pathology, Philosophy, Physics, Physiology, Pharmacology, Political Sciences, Preventive Medicine, Psychiatry, Psychology, Romance Languages and Literatures, Semitics, Sociology, Spanish, Zoology.

REGULATIONS REGARDING THESES

All theses for each degree sought must, in their final form, be presented to the Dean on the dates announced in the University Calendar. They must previously have been typewritten on official thesis paper, which may be obtained from the Treasurer of the University. The Dean will present theses to the Chairman of the Committees on the candidates; doctoral theses will further be submitted for examination to the co-referees appointed from the Faculty. Accepted theses, with their accompanying drawings, are the property of the University, and will be deposited in the University Library, but the authors of them are permitted to make copies. The candidate for the degree of Doctor of Philosophy is expected to print his thesis under the supervision of the professor in charge of his major subject, within one year after the degree is granted, and he is expected to present one hundred copies to the University, to be distributed among institutions of learning.

DOCTORATE DISPUTATIONS

The Thirty-Sixth Doctorate Disputation was held publicly on May 27, 1919. The theses that were successfully defended, the candidates, and the members of the boards of experts, were as follows:

Thesis: The classification and biology of the North American Cerambycid Larvae. By Frank Cooper Craighead, B. S., 1912, Pennsylvania State College; M. S., 1915, George Washington University. Before Leland Ossian Howard, Ph. D., M. D., LL. D., Chief of the Bureau of Entomology, U. S. Department of Agriculture; Andrew Delmar Hopkins, Ph. D., Forest Entomologist, in charge of Insect Investigations, Bureau of Entomology, U. S. Department of Agriculture; Adam Byöing, Ph. D., Expert in *Coleoptera*, Bureau of Entomology. Paul Bartsch, Ph. D., Professor of Zoology, presiding.

Thesis: Relation of initial ability to the extent of improvement. By Frank McGinley Phillips, M. Di., Iowa State Normal School; A. B., 1908, Iowa State Teachers' College; A. M., 1915, State University of Iowa. Before Edward Franklin Buchner, Ph. D., Professor of Education, Johns Hopkins University; McLeod Harvey, Ph. D., Professor of Education, Howard University; Will Carson Ryan, Jr., A. B., Director of Information Service, U. S. Bureau of Education. William Carl Ruediger, Ph. D., Professor of Educational Psychology, presiding.

The Thirty-seventh Doctorate Disputation was held publicly on October 16, 1919. The thesis that was successfully defended, the candidate, and the members of the board of experts, were as follows:

Thesis: The effect of bleaching with oxides of nitrogen upon the baking qualities and commercial value of wheat flour. By Edward Elmer Smith, B. S. in Chemical Engineering, 1914, University of Idaho; M. S., 1916, George Washington University. Before Harvey Washington Wiley, A. M., M. D., LL. D., Sc. D., Contributing Editor, Good Housekeeping Magazine; formerly Chief Chemist, U. S. Department of Agriculture; Arthur Philip Greele, A. B., LL. M., Patent Attorney, formerly Assistant Commissioner of Patents; Henry Corbin Fuller, B. S., in charge of the Division of Food Products, Institute for Industrial Research. Hiram Colver McNeil, Ph. D., Professor of Chemistry, presiding.

The Thirty-eighth Doctorate Disputation was held publicly on February 2nd and 3rd, 1920. The theses that were successfully defended, the candidates, and the members of the boards of experts, were as follows:

Thesis: The detection and estimation of small amounts of organic nitro compounds with special reference to the examination of the urine of TNT workers. By Elias Elvove, B. S., 1903, M. S., 1904, University of Kentucky; Phar. D., 1910, George Washington University. Before Carl Lucas Alsberg, A. M., M. D., Chief, Bureau of Chemistry, U. S. Department of Agriculture; Atherton Seidell, M. S., Chemist, Office of the Hygienic Laboratory, U. S. Public Health Service; Morris A. Pozen, B. S. in Chemistry, Phar. D., Chief Chemist, Health Department, of the District of Columbia. Charles Edward Munroe, Ph. D., LL. D., Professor Emeritus of Chemistry, Chairman, Committee on Explosives, Council of National Defense, presiding.

Thesis: Colonizing termites. By Thomas Elliott Snyder, B. A., 1907, Columbia University; M. F., Yale University. Before Leland Ossian Howard, Ph. D., M. D., LL. D., Chief of the Bureau of Entomology, U. S. Department of Agriculture; Alton Lacy Quaintance, B. S. A., M. S., Sc. D., Entomologist in charge of deciduous fruit investigations, U. S. Department of Agriculture; Adam Böving, Ph. D., Expert in *Coleoptera*, Bureau of Entomology, U. S. Department of Agriculture. Paul Bartsch, Ph. D., Professor of Zoology, presiding.

Thesis: The body temperature of birds. By Frank Alexander Wetmore, A. B., 1912, University of Kansas; M. S., 1916, George Washington University. Before Leonhard Stejneger, Head Curator, Department of Biology, U. S. National Museum; Theodore Sherman Palmer, A. B., M. D., Expert in Game Conservation, U. S. Biological Survey; Harry Church Oberholser, B. A., M. S., Ph. D., Assistant Biologist, U. S. Biological Survey. Paul Bartsch, Ph. D., Professor of Zoology, presiding.

THE COLLEGES

The College session of 1920-21 begins Wednesday, September 29, 1920.
The Colleges are open to men and women.

ADMISSION

Every applicant for admission is required to present a certificate of standing and regular dismissal from the school or college which he has last attended.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. Deans of the Colleges will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." For prescribed studies see the specifications of each college.

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

ENTRANCE EXAMINATIONS

The regular examinations for admission are held about June 1, and the schedule for the examinations is issued May 25.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on nine and one-half units. These units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two and one-half units), and one other language (two units); the remaining two units will be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

DEFINITION OF REQUIREMENTS

ENGLISH

(Three Units)

The requirement in English is that recommended by the National Conference on Uniform Entrance Requirements in English.

However accurate in subject matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling or other essentials of good usage.

The examination will be divided into two parts:

1. Grammar and Composition

In grammar and composition, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relations of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English, which one should know in distinction from current errors. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books read, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps eight or ten, from which the candidate may make his own selections. He will not be expected to write more than four hundred words per hour.

2. Literature

The examination in literature will include:

A. Reading.—General questions designed to test such a knowledge and appreciation of literature as may be gained by an intelligent reading of at least two books under each of five groups as follows: Group I—Classics in Translation (a selection from any other group may be substituted for this), Group II—Shakespeare, Group III—Prose Fiction, Group IV—Essays, Biography, etc., Group V—Poetry. Other books than those named in the Uniform Entrance Requirement list will be accepted under each group, provided the books are of standard literary character. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but the books named in this list will not be made the basis of detailed questions.

B. Study.—The books provided for study are arranged in four groups, from each of which one selection is to be made.

GROUP I, DRAMA

Shakespeare: Julius Cæsar, Macbeth, or Hamlet.

GROUP II, POETRY

Milton: L'Allegro, Il Penseroso, and either Comus or Lycidas.

Tennyson: The Coming of Arthur, The Holy Grail, and The Passing of Arthur.

The selections from Wordsworth, Keats and Shelley in Book IV of Palgrave's Golden Treasury (First Series).

GROUP III, ORATORY

Burke: Speech on Conciliation with America.

Macaulay's Two Speeches on Copyright, and Lincoln's Speech at Cooper Union.

Washington's Farewell Address and Webster's First Bunker Hill Oration.

GROUP IV, ESSAYS

Carlyle: Essay on Burns, with a selection from Burns' Poems.

Macaulay: Life of Johnson.

Emerson: Essay on Manners.

A test on the books prescribed under the *Study* groups will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

For the George Washington University Scholarship Entrance Examinations the books for *Reading* and *Study* will be the required English of the Washington High Schools.

LATIN

Elementary (two units)

a. I. Latin Grammar The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

II. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Cæsar.

b. Cæsar: Any four books of the Gallie War, preferably the first four.

Advanced (two units)

a. Cicero: Any six orations from the following list, but preferably the first six mentioned. The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of *Æneid*.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

GREEK

Elementary (two units)

a. I. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

II. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions. The examination in grammar and prose composition will be based on the first two books of Xenophon's *Anabasis*.

b. Xenophon: The first four books of the *Anabasis*.

Advanced (one unit)

a. Homer: The first three books of the *Iliad* (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's *Anabasis*.

FRENCH

Elementary (two units)

Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-year's course of five periods per week.

Advanced (two units)

Candidates in advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-year's course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

SPANISH

(Two units)

Candidates in Spanish must have a good knowledge of grammar including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-year's course of five periods per week.

GERMAN*Elementary (two units)*

Candidates in Elementary German must have had a two-year's course or five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of the elements of German grammar and the ability to translate simple prose into German are requisite. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (two units)

Candidates in Advanced German must have had a four-year's course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

HISTORY

In this subject special importance is attached to preparation in geography.

Ancient (one unit)

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's, or West's History of the Roman People.

Mediaeval History (one unit)

As much as is contained in first twenty chapters of Robinson's Mediaeval and Modern Times.

Modern European History (one unit)

As much as is contained in Robinson's Mediaeval and Modern Times from chapter 21 to the end.

English History (one unit)

As much as is contained in Larned's or Cheyney's History of England.

American History with the Elements of Civil Government (one unit)

As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

MATHEMATICS

Elementary and Intermediate Algebra (one and one-half units)

I. Algebra to Quadratics: The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

II. Quadratics, etc.: Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

Advanced Algebra (one-half unit)

The progressions; the elementary treatment of permutations and combinations; the use of four and five place tables of logarithms; undetermined coefficients; the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents; the elementary treatment of the theory of equations.

Plane Geometry (one unit)

General text propositions, including the solution of simple original exercises and numerical problems.

Solid Geometry (one-half unit)

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

Plane Trigonometry (one-half unit)

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

PHYSICS

(One unit)

It is recommended that the candidate's preparation should include:

- a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

CHEMISTRY

(One unit)

The candidate's preparation in chemistry should include:

- a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.
- b. Instruction by lecture-table demonstrations.
- c. The study of at least one modern text-book.

Requirements.—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur, phosphorus, silicon, potassium, sodium, calcium, magnesium, zinc, copper, mercury, silver, aluminum, lead, tin, iron, manganese, chromium.*

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the *mosphere* (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

ADDITIONAL SUBJECTS

Certificates will be accepted in botany, zoology, physiology, physiography, political economy, drawing, music, and other accredited subjects in secondary schools.

Manual-training High School Subjects

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, will be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

Business High School Subjects

Commercial subjects in business high schools or schools of similar grade, when duly certified, will be credited to the extent of four units.

ADMISSION TO ADVANCED STANDING

Due credit is given for properly certified courses of study pursued in other colleges and universities.

SPECIAL STUDENTS

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

SCHOLARSHIPS AND PRIZES

Applications for scholarships should be filed with the Dean of the College in which the student is to register not later than September fifteenth. All Scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarships will be revoked. All scholarships are awarded by the Faculty of Arts and Sciences on recommendation of its Committee on Scholarships and other University aid.

SCHOLARSHIPS FOR COMPETITION

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance examinations. Holders of these scholarships are expected to pursue a regular course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

Kendall Scholarship.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the registration, laboratory, and graduation fees.

University Scholarships.—The University offers also six scholarships, to be awarded annually to members of the graduating classes of any of the Washington High Schools. These scholarships continue throughout the undergraduate course, and students holding them pay only the registration, laboratory, and graduation fees.

SCHOLARSHIPS FOR ASSIGNMENT

Davis Scholarship.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

Mary Lowell Stone Scholarship.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

Maria M. Carter Scholarship.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

Farnham Scholarship.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

Withington Scholarship.—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

Walker scholarship.—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an annual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

Morehouse Scholarship.—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

Nellie Maynard Knapp Scholarship Fund.—A fund of \$5,000 established in 1915 by the Columbian Women in memory of its president, Mrs. Martin A. Knapp, to provide scholarships for women. Application may be made to any of the Deans in the Department of Arts and Sciences.

Henry Harding Carter Scholarships.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consist of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

The Isabel Anderson Scholarship Fund.—A fund of \$1,000 given by Isabel (Mrs. Larz) Anderson, Litt. D., for the education of needy Filipino students. Students under this fund are nominated by the Bureau of Insular Affairs of the War Department.

The Byron Andrews Scholarship Fund.—A fund founded by Mrs. Belle Fisk Andrews in memory of her husband, the late Byron Andrews, to provide scholarships "For ambitious and needy students, who desire to pursue courses in English, Latin, Journalism, History, Literature or Political Science."

Founders of Columbian Women Scholarship.—This scholarship was established by the Columbian Women in 1920. At present it consists of a fund of \$1,800 the income from which may be assigned to a deserving woman student. Application may be made to any of the Deans of the Department of Arts and Sciences.

Admiral Powell Endowment.—The Admiral Powell Endowment was made by Admiral Levin M. Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, to warrant officers who are preparing for examination for appointment as Ensign, to persons desiring to enter the Navy as Acting Ensigns for engineering duty, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	<i>Hours</i>
Navigation and Nautical Astronomy.....	4
Algebra and Geometry.....	6
Trigonometry.....	3
Mechanical and Machine Drawing.....	8
English.....	6
French.....	6
German.....	6
Spanish.....	6
International Law.....	6
Commercial Geography.....	6
Boilers and Power Plants.....	3
Mechanical Laboratory.....	4
Electrical Engineering.....	6

Ministerial Aid.—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity in the regular courses of Columbian College, preparing for the ministry and not yet ordained. Any student receiving Ministerial Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every twelve dollars of tuition remitted, and of not more than four hours in any one week.

University Aid.—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be loaned to undergraduate students in regular courses in the Departments of Arts and Sciences, whose circumstances warrant pecuniary assistance. Any student receiving University Aid is expected to repay it as soon as possible. In occasional instances he may be enabled, while still a student, to repay it in part or whole through clerical or like service rendered the University.

PRIZES

(Only candidates for degrees may compete for these prizes)

Staughton and Elton Prizes.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D. D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

Ruggles Prizes.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL. D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

Davis Prizes.—The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in cash or gold medals, of the value of five dollars, of ten dollars, and of fifteen dollars annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College." Only members of the Senior Class are eligible to compete for these prizes.

Daughters of the American Revolution Prizes.—These prizes founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediaeval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

The Thomas F. Walsh Prize.—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the

graduating class who, having maintained a high standard in the regular classes of Mediaeval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of England.

E. K. Cutter Prize.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to the member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

Willie E. Fitch Prize.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

The Gardiner G. Hubbard Memorial Prize.—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that member of the graduating class who has during four years maintained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

Muth Prize.—Geo. F. Muth and Company offer a slide rule to the student who makes the highest record in Mechanical Drawing I.

Colonial History Prize.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

James Macbride Sterrett, Jr., Prize.—Founded by Professor James Macbride Sterrett, in memory of his son, consists of a gold medal annually awarded to that student taking Course I in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

The Chi Omega Prize in Philosophy.—An annual prize of fifteen dollars is offered by the Phi Alpha Chapter of the Chi Omega Fraternity for the best essay on a philosophical subject to be announced at the close of the preceding academic year by the Committee in Charge. Essays must meet the requirements defined by the Committee and be submitted on or before April 1. Only women students who are members of a senior class in the Department of Arts and Sciences, and who are or have been registered in General Psychology, Logic, and the History of Philosophy, are eligible to compete.

Sigma Kappa English Prize.—An annual prize of a set of books to the value of ten dollars is offered by the Sigma Kappa Fraternity to the student passing the best examination in the year's work in English Rhetoric. All members of the classes in English Rhetoric are eligible for this special examination, which will be given during the final examinations.

Pi Beta Phi Prize in Political Science.—The Pi Beta Phi Fraternity has set aside ten dollars as a prize for the best essay written during the year by a student of political science on a subject approved by the instructor. The essays must be submitted by May first.

Pi Beta Phi Prize in Education.—An annual prize of ten dollars is offered by the Pi Beta Phi Fraternity for the best essay on an educational topic. The essays will be judged by a committee of three, consisting of the Professor of Education and two others designated by him. The essays must be submitted by May first.

Phi Mu Prize in Playwriting.—An annual prize is offered by the Phi Mu Fraternity for a one-act play of approved excellence written by a student in the University. The award will be made by the English Department of the University, and the George Washington University Players shall have the opportunity to give the first production of the play.

Sigma Kappa Prize in Chemistry.—A prize of ten dollars is offered annually by Zeta Chapter of Sigma Kappa Fraternity to that student who passes the best examination in Chemistry 1, 2 and 23.

Genevieve Chatterton McCutchins Prizes.—Two cash prizes of \$25.00 and \$15.00, based on the income of a memorial fund of one thousand dollars, to be awarded annually for the best and the next best essays on subjects connected with Archaeology or Painting. In their award consideration will be given to students' knowledge of contemporary literature, history, or music, as relating to the progress of the fine arts. These prizes are open to both graduates and undergraduates.

Kappa Alpha Prize in Economics.—An annual prize of ten dollars is offered by the Alpha Nu Chapter of Kappa Alpha Fraternity for the best essay on a subject in the field of Economics. The essays will be judged by a committee of three, consisting of the Professor of Economics, a member designated by the Fraternity and a third member designated by the first two. The essays must be submitted by the first of May.

DAVIS PRIZE SPEAKING

The Davis Prize Speaking is held on the second Tuesday after the Easter holidays. The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of Columbian College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the Columbian College.

PRIZE AWARDS, 1918-1919

- Staughton Prize*.—Rebekah Sanborn.
Ruggles Prizes.—Frank Langelotti.
Davis Prizes.—First prize, Earle Milburn Wallick; second prize, Margaret Joanna Prentiss; third prize, Lasalia McCaffrey.
Daughters of the American Revolution Prizes.—Sadie White Beller, Ralph Aaron Styer.
Thomas S. Walsh Prize.—Lino Juan Castillejo.
E. K. Cutter Prize.—Margaret Joanna Prentiss.
Gardner G. Hubbard Prize.—Earle Milburn Wallick.
Muth Prize.—Frank Russell Garman.
Colonial Dames Prize.—Eugene Underwood.
Chi Omega Prize in Sociology.—Mary Louise Sturman.
Sigma Kappa Prize.—Ora May Mon.
Pi Beta Phi Prize in Political Science.—Herbert Clarence Fooks.
Pi Beta Phi Prize in Education.—Charles Geschicketer.
Phi Mu Prize.—Evelyn Emig.

HIGH SCHOOL SCHOLARSHIP AWARDS, 1918-1919

- Kendall Scholarship*.—Henry Temin, Central High School.
First University.—Ellis Haworth, Eastern High School.
Second University.—Harry Friedenberg, Central High School.
Third University.—Elizabeth H. Kendrick, Central High School.
Fourth University.—Janet Elliot, Central High School.
Fifth University.—William Harris, McKinley Manual Training School.
Sixth University.—Marjorie S. Gerry, Central High School.

COLLEGE CHAPEL

Chapel Services are held at 12.20 p. m., Monday, Wednesday, and Friday, throughout the academic year.

The Deans of the Colleges will confer with students as they may desire on questions concerning their welfare and will co-operate with them in all ways to make the college life one of personal helpfulness.

For catalogues, application blanks, and further information, address

THE RECORDER,

The George Washington University,
 2023 G Street, Washington, D. C.

FEES

1. Annual registration fee. \$ 2
2. Tuition fee for each semester-hour credit of courses leading to the degrees of A. B., S. B., A. M., S. M., C. E., E. E., M. E. 6
 The maximum fee charged in any one year is \$180.
3. Tuition fee per annum for graduate courses leading to the degree of Ph. D. 180

4. Registration fee for students taking problems of the Beaux Arts Society.....	2
5. Laboratory courses:	
Material fees:	
Experimental Psychology.....	2
Geology 1, Zoology, Botany, each.....	5
Mechanical Engineering 9, 10, 11, each.....	5
Chemistry 2, 3, 7, 28 and 30; Electrical Engineering; Physics, each.....	10
Chemistry 4 (Assaying).....	20
Chemistry 8.....	5
Chemistry, 20, 21 and 25, each.....	25
Deposits to cover breakage of apparatus issued, the amount paid in excess of breakage to be returned:	
Chemistry, 2, 3, 7, 8, 28 and 30, each.....	10
Chemistry, 20.....	15
Chemistry, 21 and 25, each.....	20
6. Microscope rental in Botany and Zoology 1.....	5
7. Tuition fee for the following special course, not taken by candidates for a degree:	
Chemistry 4 (Assaying).....	40
8. Fee for certificates under the seal of the University.....	2
9. Fee for graduation.....	10

The above fees are for students entering in September, 1918, or afterwards. Students who were in attendance in 1917-18 and each year since then will pay fees according to the announcements in the catalogue for 1917-18, published in March, 1917.

Students are registered for the college year unless otherwise stated on the registration paper. All requests for withdrawals or for changes in courses of study must be made in writing to the Dean, and a student is liable for all charges for the courses for which he has registered unless changes are approved by the Dean.

All charges are by the scholastic year. Registration, library and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly installments in advance. Students unable to pay their fees monthly in advance will be required to furnish as security an acceptable personal or corporate bond for \$200 for which a charge of \$3.00 will be made.

The first monthly payment is due not later than October first, and subsequent monthly payments are due on the first of each month. A student has no right to attend a class if his fees are unpaid and may be excluded by the Dean.

All fees are payable at the office of the treasurer of the University, 2101 G Street.

COLUMBIAN COLLEGE

ADMISSION

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements (p. 32) of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirement must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirements is elective and may be satisfied in general by any accredited secondary school subjects.

For admission to advanced standing or as special students, see (p. 39.)

REQUIREMENTS FOR DEGREES

The undergraduate degrees offered by Columbian College are Bachelor of Arts, and Bachelor of Science in Medicine. To be recommended for either of these degrees, the student must satisfy the admission requirements, and must complete at least one hundred and twenty semester-hours of undergraduate courses *at least twenty-four semester-hours of which (or twelve semester-hours in the combined courses), must be completed in Columbian College.* A "semester-hour" of credit is one recitation or lecture a week or one laboratory period a week for one semester. No time limit for the course is prescribed and the degree is given when the total of prescribed and elective studies is completed.

The class hours are so arranged that persons who can give only part time to college work may complete a full college course and obtain a degree. Such students usually take six years to complete the course. Classes in required and elective subjects are scheduled in the two class periods from five-ten o'clock to six-fifty. The drawing rooms and laboratories are open from nine o'clock in the morning until half past ten at night.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the student shall be studying for a degree, after the completion of all final examinations in such student's final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

FOR THE DEGREE OF BACHELOR OF ARTS

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study amounting to at least one hundred and twenty semester-hours including a group of prescribed subjects.

There are six curriculum groups, each leading to the degree of Bachelor of Arts. Every candidate for the degree of Bachelor of Arts selects one of these groups, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years are largely elective, subject to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the six curriculum groups is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by the student whose preparatory work has included four years of Latin or two years of preparatory Latin supplemented by "Latin B" in college.

Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages.

Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary.

Group IV emphasizes Political Science and Economics and History, constituting important preparation for the Law School or the public service.

Group V includes all the pre-medical subjects and is specially constituted as a regular college course in preparation for the Medical School.

Group VI emphasizes Commerce and kindred subjects in preparation for commercial life or the public service.

(NOTE—Whenever in the following groups a modern language is taken, if it is elementary, the same language shall be continued the succeeding year.)

GROUP I, LATIN

	<i>Semester Hours</i>
Latin*	12
Foreign Languages	18
English	12
History	6

	<i>Semester Hours</i>
Mathematics.....	6
Philosophy.....	6
Electives.....	60
	<hr/>
	120

GROUP II, MODERN LANGUAGES

	<i>Semester Hours</i>
Modern Languages.....	24
English.....	12
History.....	12
Philosophy.....	12
Political Science.....	6
Natural Science.....	6
Electives.....	48
	<hr/>
	120

GROUP III, NATURAL SCIENCE

	<i>Semester Hours</i>
Natural Science.....	18
Mathematics.....	12
English.....	6
Modern Languages.....	12
Philosophy.....	6
Economics.....	6
Electives.....	60
	<hr/>
	120

* Students who offer only the two elementary units of Latin for admission may qualify for Group I by taking "Latin B" in college (see p. 95), but this will not be counted as a part of the twelve semester-hours of Latin required in this group.

DEPARTMENT OF ARTS AND SCIENCES

GROUP IV, POLITICAL SCIENCE

	<i>Semester Hours</i>
Political Science and Economics.....	18
History.....	12
Commerce.....	6
English.....	6
Modern Languages.....	12
Mathematics.....	6
Philosophy.....	6
Electives.....	54
	<hr/>
	120

GROUP V, PRE-MEDICAL

	<i>Semester Hours</i>
Chemistry, 1, 2 and 8.....	16
Physics, 3 and 4.....	10
Zoology, 1 and 2.....	12
English.....	6
Modern Languages (preferably French or German).....	12
Philosophy (including Psychology).....	6
Mathematics.....	6
Electives.....	52
	<hr/>
	120

GROUP VI, COMMERCE

	<i>Semester Hours</i>
Commerce.....	16
Economics.....	10
Political Science and History.....	18
English.....	6
Modern Languages.....	12
Mathematics.....	6
Philosophy (including Psychology).....	6
Electives.....	46
	<hr/>
	120

SIX-YEAR COURSE FOR THE DEGREES OF BACHELOR OF ARTS AND BACHELOR OF LAWS

Professional courses in Law will be credited towards the degree of Bachelor of Arts to the extent of thirty semester hours. On the completion of ninety semester hours of work in college, *at least twelve semester-hours of which must be taken in Columbian College*, including all of the required subjects in some one of the curriculum groups, and of the first year of the regular course in the Law School, the student will receive the degree of Bachelor of Arts. This combined course contemplates three years of college study and three years in the Law School. The effect is to shorten the period of study for the two degrees one year.

SEVEN-YEAR COURSE FOR THE DEGREE OF BACHELOR OF ARTS AND DOCTOR OF MEDICINE

Professional courses in Medicine will be credited towards the degree of Bachelor of Arts to the extent of thirty semester hours. On the completion of ninety semester hours of credit in college, *at least twelve semester-hours of which must be taken in Columbian College*, including all of the required subjects in some one of the curriculum groups, preferably Group V, and on the completion of the first year of the regular course in the Medical School, the student will receive the degree of Bachelor of Arts. This combined course contemplates three years of college study and four years in the Medical School. The effect is to shorten the period of study for the two degrees one year.

PUBLIC SERVICE COURSES

These courses are designed to impart general culture and a broad grasp of public questions, and thus to provide a training that will prove of value in commercial life, the practice of law, or public service. The work prescribed is broader than the requirement for entrance into the Consular and Diplomatic Service, so that the student who completes with credit the appropriate courses has a training that will fit him to rise to the higher positions in the service to which he may be appointed.

Regular students who are preparing for the Government Service should register for Group IV or Group VI, of the curriculum requirements for the degree of Bachelor of Arts, and should elect, also, the subjects named in Section 2 of the "Regulations Governing Examinations Promulgated by the Board of Examiners, December 13, 1906."

Special students who are preparing for the Consular Service examinations should register for such courses as relate to subjects named in Section 2, of the Government Regulations.

**REGULATIONS GOVERNING EXAMINATIONS PROMULGATED BY
THE BOARD OF EXAMINERS, DECEMBER 13, 1906***

Section 2 reads as follows: The examinations will consist of an oral and a written one, the two counting equally. The object of the oral examination will be to determine the candidate's business ability, alertness, general contemporary information, and natural fitness for the service, including moral, mental, and physical qualifications, character, address, and general education and good command of English. In this part of the examination the applications previously filed will be given due weight by the Board of Examiners, especially as evidence of the applicant's business experience and ability. The written examination will include those subjects mentioned in the Executive order, to-wit, at least one modern language other than English—French, German, or Spanish;* the natural, industrial, and commercial resources and the commerce of the United States, especially with reference to possibilities of increasing and extending the foreign trade of the United States; political economy, and the elements of international, commercial, and maritime law. It will likewise include American history, government, and institutions; political and commercial geography; arithmetic (as used in commercial statistics, tariff calculations, exchange, accounts, etc.); the modern history, since 1850, of Europe, Latin America, and the Far East, with particular attention to political, commercial, and economic tendencies. In the written examination, composition, grammar, punctuation, spelling, and writing will be given attention.

Students who seek a designation for consular and diplomatic examination should apply to the Department of State for full information. Consular service examinations are held in Washington only.

**SUGGESTIONS FOR FRESHMEN COURSES IN THE CURRICULUM
GROUPS**

GROUP I, LATIN

Latin 1 or "B," English, History, Mathematics, French or German.

GROUP II, MODERN LANGUAGES

French, German, English, History, Chemistry 1 (or Chemistry 1 and 2).
French or German, Spanish, English, History, Mathematics.
French or German, Spanish, English, Political Science, Zoology.

GROUP III, NATURAL SCIENCE

Chemistry 1 and 2, Mathematics, English, French, German or Spanish, Economics.

GROUP IV, POLITICAL SCIENCE

Political Science, History, English, French or German, Mathematics.
Economics, Political Science, English, Mathematics, Spanish.
Economics, English, History, Mathematics, Spanish.

* As amended by Board of Examiners, February 13, 1911.

GROUP V, PRE-MEDICAL

Chemistry 1 and 2, Zoology 1, English, French or German, Mathematics.

GROUP VI, COMMERCE

Economics, Commerce, English, French or Spanish, Political Science or History, Mathematics.

GENERAL SUGGESTIONS

English Rhetoric (1 or 2) is required in every curriculum group. Mathematics is required in every group except the second, History should begin with Mediaeval history, Modern Languages should be taken in a sequence of at least two years in the same language. Information about all studies is given in the alphabetical arrangement of subjects under "Courses of Instruction."

The specified subjects in the selected group should be taken in the earlier part of the college course leaving the electives for the later years. Subjects should be chosen with view to an even distribution through the days of the week. Most courses come three times a week, either on Monday, Wednesday and Friday, or on Tuesday, Thursday and Saturday. Most general culture subjects are given in two sections, one early in the day and one late. Students who have all their time for college work should take the early sections. The late sections are given in the last two periods, at five-ten o'clock or at six o'clock, in order to afford to those employed in Government offices the opportunities of college study. Teachers in the public schools can usually take also the courses announced for four o'clock.

Fifteen hours a week is a standard amount of work for completing the college course in four years. When the college work is limited to the last two periods and the evening laboratory periods, the length of the course is generally six years.

Detailed information about fees is given on pages 45-46

FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICINE**SIX-YEAR COURSE FOR THE DEGREES OF BACHELOR OF SCIENCE
IN MEDICINE AND DOCTOR OF MEDICINE**

Regular students in this course will complete in two years the prescribed work in college, at least twelve semester hours of which must be taken in Columbian College, and the four-year course in the Medical School. On the completion of this six-year course, the student will receive at the same time the degrees of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum for the Freshman and Sophomore years in college, including the pre-medical requirements, is as follows:

Freshman Year

	<i>Semester Hours</i>
Chemistry 1 and 2.....	10
English 1 or 2.....	6
French or German.....	6
Mathematics.....	6
Zoology 1.....	6
Electives.....	2
	<hr/>
	36

Sophomore Year

	<i>Semester Hours</i>
Chemistry 8.....	6
French, German or Spanish.....	6
Philosophy (including Psychology).....	6
Physics 3 and 4.....	10
Zoology 2.....	6
Electives.....	2
	<hr/>
	36

SPECIAL COURSE FOR ADMISSION TO THE MEDICAL SCHOOL

First Year

	<i>Semester Hours</i>
Chemistry 1 and 2.....	10
✓ English 1 or 2.....	6
✓ Zoology 1.....	6✓
Electives.....	8
	<hr/>
Total semester hours.....	30

Second Year

	<i>Semester Hours</i>
Physics 3 and 4.....	10
✓ Zoology 2.....	6 —
✓ Chemistry 8.....	6 —
Electives.....	8
Total semester hours.....	30

NOTE.—The Council on Medical Educational of the American Association states:—"Of the 60 semester hours required as the measurement of 2 years work, at least 18, including the 6 semester hours in English, should be in subjects other than the physical, chemical, or biologic science."

COLLEGE OF ENGINEERING

ADMISSION

Candidates for admission to the Freshman Class in the Civil Engineering, Electrical Engineering, Mechanical Engineering and Chemical Engineering Courses are required to present fifteen units for admission, distributed as follows:

	<i>Units</i>
English.....	3
French, German or Spanish.....	2
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Chemistry.....	1
Physics.....	1
Electives.....	4
	<hr/>
Total.....	15

Candidates for admission to the Freshman Class in the Chemistry Course are required to present fifteen units for admission, distributed as follows:

	<i>Units</i>
English.....	3
French, German or Spanish.....	2
Plane Geometry.....	1
Elementary and Intermediate Algebra.....	1½
Chemistry.....	1
Electives.....	6½
	<hr/>
Total.....	15

Candidates for admission to the Freshman Class in the Architectural Course are required to present fifteen units for admission, distributed as follows:

	<i>Units</i>
English.....	3
French, German or Spanish.....	2
Plane and Solid Geometry.....	1½
Elementary and Advanced Algebra.....	2
Plane Trigonometry.....	½
Electives.....	6
	<hr/>
Total.....	15

For detailed descriptions of the requirements in each preparatory subjects see pages 32-39.

For admission to advanced standing as a special student, see page 39.

COURSES FOR A DEGREE

Six courses of study are offered:

- I. CIVIL ENGINEERING.
- II. ELECTRICAL ENGINEERING.
- III. MECHANICAL ENGINEERING.
- IV. CHEMICAL ENGINEERING.
- V. CHEMISTRY.
- VI. ARCHITECTURE.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, in Mechanical Engineering, in Chemical Engineering, in Chemistry and in Architecture, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the appropriate engineering degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

The class hours are so arranged that persons who can give only part time to college work may complete a full engineering course and obtain a degree. Such students usually take six years to complete the course. Classes in all the general studies of the engineering courses and in many of the technical subjects are regularly scheduled in the two class periods from five-ten o'clock to six-fifty; and other technical courses are given in alternate years in these periods. The drawing rooms and laboratories are open from nine o'clock in the morning until half past ten at night.

REQUIREMENTS FOR A DEGREE

The arrangement of the topics in each of the regular courses for degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of Department Subjects on page 72, to which reference should be made for more complete description.

CIVIL ENGINEERING COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

FRESHMAN YEAR

	<i>Semester-Hour Credits</i>
Chemistry, 1, 7.....	10
General Chemistry and Qualitative Analysis.	
English, 1 or 2.....	6
Rhetoric.	
French, German or Spanish.....	6

	<i>Semester-Hour Credits</i>
Mechanical Drawing, 1, 8.....	6
Mechanical Drawing; Descriptive Geometry.	
Mathematics, 9 or 12.....	6
Trigonometry; Analytic Geometry.	

SOPHOMORE YEAR

Astronomy, 2.....	2
Practical Astronomy.	
Civil Engineering, 1, 3, 4.....	14
Surveying; Highway Engineering; Materials of Construction.	
Commerce, 33.....	4
Commercial Law.	
Mathematics, 20 or 21.....	6
Calculus.	
Physics, 1, 2.....	10
General Physics; Laboratory Physics.	

JUNIOR YEAR

Applied Mathematics, 20, 21, 22.....	12
Mechanics; Hydraulics, Mechanics or Materials.	
Civil Engineering, 2, 22.....	16
Railroad Engineering; Theory of Structures.	
Electrical Engineering, 6.....	4
Industrial Electricity.	
Geology, 21.....	4
Engineering Geology.	

SENIOR YEAR

Civil Engineering, 21, 23, 24, 27.....	30
Hydraulic Engineering; Theory of Structures; Sanitary Engineering; Reinforced Concrete.	
Elective.....	4

ELECTRICAL ENGINEERING COURSE LEADING TO THE DEGREE
OF BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

FRESHMAN YEAR

Identical with the Civil Engineering Course

SOPHOMORE YEAR

	<i>Semester-Hour Credits</i>
Civil Engineering, 4.....	4
Materials of Construction.	

	<i>Semester Hour Credits</i>
Commerce, 33.....	4
Commercial Law.	
Mathematics, 20 or 21.....	6
Calculus.	
Mechanical Drawing, 2.....	4
Machine Drawing.	
Mechanical Engineering, 1.....	8
Mechanism.	
Physics, 1, 2.....	10
General Physics; Laboratory Physics.	

JUNIOR YEAR

Applied Mathematics, 20, 21, 22.....	12
Mechanics; Hydraulics; Mechanics of Materials.	
Chemistry, 6.....	2
Metallurgy.	
Electrical Engineering, 1, 2, 3, 4, 5.....	14
Mathematical Theory of Electricity; Direct Current Theory and Machinery; Design; Electrical Engineering Laboratory.	
Mechanical Engineering, 9, 20.....	8
Engineering Laboratory; Thermodynamics, Steam Boil- ers and Power Plant Accessories.	

SENIOR YEAR

Civil Engineering, 5, 6.....	2
Surveying Instruments; Foundations.	
Electrical Engineering, 21, 22, 23, 24, 27, 28, 29.....	22
Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory; Elec- tric Railways; Telephones and Telegraph; Electric Illumination.	
Mechanical Engineering, 10, 23.....	4
Engineering Laboratory; Hydraulic Machinery.	
Electives.....	6

MECHANICAL ENGINEERING COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

FRESHMAN YEAR

Identical with the Civil Engineering Course

SOPHOMORE YEAR

	<i>Semester-Hour Credits</i>
Civil Engineering, 4.....	4
Materials of Construction.	
Commerce, 33.....	4
Commercial Law.	
Mathematics, 20 or 21.....	6
Calculus.	
Mechanical Drawing, 2.....	4
Machine Drawing.	
Mechanical Engineering, 1.....	8
Mechanism.	
Physics, 1, 2.....	10
General Physics; Laboratory Physics.	

JUNIOR YEAR

Applied Mathematics, 20, 21, 22.....	12
Mechanics; Hydraulics; Mechanics of Materials.	
Civil Engineering, 22.....	5
Theory of Structures.	
Mechanical Engineering, 9, 20, 24, 26, 27.....	16
Engineering Laboratory; Thermodynamics, Steam Boilers and Power Plant Accessories; Advanced Mechanism, Dynamics of Machinery; Power Plant Problems.	
Electrical Engineering, 2.....	6
Dynamos and Motors.	

SENIOR YEAR

Chemistry, 6.....	2
Metallurgy.	
Civil Engineering, 5, 6.....	2
Surveying Instruments; Foundation.	
Electrical Engineering, 4, 5.....	4
Electrical Laboratory.	
Mechanical Engineering, 10, 11, 23, 25, 28, 29, 30, 31.....	21
Engineering Laboratory; Hydraulic Machinery; Machine Design; Industrial Management; Heating and Ventilating; Gas Engines; Steam Turbines.	
Electives.....	3

CHEMICAL ENGINEERING COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

FRESHMAN YEAR

	<i>Semester-Hour Credits</i>
Architecture, 2.....	2
Free hand Drawing.	
Chemistry, 1, 2.....	10
General Chemistry; Laboratory Practice.	
English, 1 or 2.....	6
Rhetoric.	
French, German or Spanish.....	6
Mathematics, 9 or 12.....	6
Trigonometry; Analytic Geometry.	
Mechanical Drawing 1.....	4
Mechanical Drawing.	

SOPHOMORE YEAR

Chemistry, 3, 20.....	10
Chemical Laboratory; Qualitative Analysis.	
Geology, 1.....	4
Mineralogy.	
Mathematics, 20 or 21.....	6
Calculus.	
Mechanical Engineering, 1.....	8
Mechanism.	
Physics, 1 and 2.....	10
General Physics, Laboratory Physics.	

JUNIOR YEAR

Applied Mathematics, 20, 22.....	8
Mechanics; Mechanics of Materials.	
Chemistry, 6, 21, 23.....	14
Metallurgy; Quantitative Analysis; Organic Chemistry.	
Commerce, 33.....	4
Commercial Law.	
Electrical Engineering, 1.....	4
Elementary Mathematical Theory of Electricity.	
Mechanical Engineering, 20.....	6
Thermodynamics, Steam Boilers and Power Plant Accessories.	

SENIOR YEAR

Chemistry, 24, 25, 26, 29.....	22
Organic Chemistry; Organic Laboratory; Physical Chemistry; Industrial Chemistry.	
Mechanical Engineering, 9, 10.....	4
Mechanical Laboratory.	
Electives.....	6

**CHEMICAL COURSE LEADING TO THE DEGREE OF BACHELOR
OF SCIENCE IN CHEMISTRY**

FRESHMAN YEAR

	<i>Semester-Hour Credits</i>
Architecture, 2.....	4
Freehand Drawing.	
Chemistry, 1, 2.....	10
General Chemistry; Laboratory Practice.	
English, 1 or 2.....	6
Rhetoric.	
French, German or Spanish.....	6
Mathematics, 3 or 6.....	6
College Algebra; Solid Geometry; Elementary Trigonometry.	
Mechanical Drawing, 4.....	2
Mechanical Drawing.	

SOPHOMORE YEAR

Chemistry, 3, 20.....	10
Chemical Laboratory; Qualitative Analysis.	
French, German or Spanish.....	6
Mathematics, 9 or 12.....	6
Trigonometry; Analytic Geometry.	
Physics, 3, 4.....	10
General Physics; Physics Laboratory.	
Electives.....	4

JUNIOR YEAR

Chemistry, 21 (4), 23.....	12
Quantitative Analysis; Organic Chemistry.	
Commerce, 33.....	4
Commercial Law.	
French, German or Spanish.....	6
Geology, 1.....	4
Mineralogy.	
Mathematics, 20 or 21.....	6
Calculus.	
Electives.....	4

SENIOR YEAR

Chemistry, 6, 24, 25, 26, 27.....	22
Metallurgy; Organic Chemistry; Organic Laboratory; Physical Chemistry; Stereo-Chemistry.	
Geology, 2.....	4
General Geology.	
Electives.....	8

COURSE IN ARCHITECTURE LEADING TO THE DEGREE OF
BACHELOR OF SCIENCE OF ARCHITECTURE

FRESHMAN YEAR

	<i>Semester-Hour Credits</i>
Architecture, 2, 3, 4.	14
Free-hand Drawing; Architectural Drawing and Element- ary Design; Projections, Shades, Shadows and Perspective.	
English, 1 or 2.	6
Rhetoric.	
French.	6
Mathematics, 9 or 12.	6
Trigonometry; Analytic Geometry.	

SOPHOMORE YEAR

Architecture, 5, 6, 8.	18
Architectural Design; Free-hand Drawing; History of Architecture.	
English, 5 or 6.	6
English Literature.	
French.	6
Geology, 2.	4

JUNIOR YEAR

Architecture, 20, 21, 22, 24, 25, 33, 41.	30
History of Architecture; Building Construction; Sanita- tion; Pen and Ink Rendering; Design; Water Color, Heating and Ventilating.	
Physics, 1 or 3.	3
General Physics.	

SENIOR YEAR

Architecture, 27 or 37, 28, 39, 40, 43, 44.	30
Design; History of Painting and Sculpture; Building Construction; Water Color; Office Practice; Advance Construction.	
Commerce, 33.	4
Commercial Law.	
Electrical Engineering, 29.	2
Electric Illumination.	
Electives.	2

SPECIAL STUDENTS

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

FEES

The annual tuition fee for a student taking courses aggregating fifteen or more hours a week throughout the year is one hundred and eighty dollars. Part time students pay in accordance with the amount of work taken, the fee being six dollars for each semester-hour credit. For courses in the laboratories there are additional laboratory fees. Full statements in regard to the fees are given on pages 45 and 46.

TEACHERS COLLEGE

The purpose of Teachers College is to provide (a) collegiate training for teachers, (b) instruction in education as a department of science.

The aims of the Teachers College may be summarized as follows:

- a. To promote the knowledge of educational science.
- b. To fit students for the higher positions in the public school service.
- c. To secure to teaching the rights and prerogatives of a profession.
- d. To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

ORGANIZATION

Teachers College provides a four years' college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to professional courses and to specialization in the subjects which the student expects to teach. The schedule of courses is arranged so as to meet the convenience of both full time and part time students. By attending afternoon and Saturday classes, teachers in the schools of Washington and vicinity may complete all the requirements for a degree without giving up their positions.

ADMISSION

Candidates for admission to the Freshman Class in Teachers College must meet the general admission requirements (p. 32) of fifteen units. *Three of these must be in English, two and one-half in Mathematics, and two in one of the following languages; Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

Persons desirous of taking work without becoming candidates for a degree, may be admitted as *special students* on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

ADVANCED STANDING

Students transferring from normal schools, colleges, and other schools of similar rank will be admitted to such advanced standing as the courses they have pursued warrant. Graduates of normal schools with two-year courses resting upon graduation from an approved four-year high school are granted forty-eight semester-hours of advanced standing.

For further information concerning admission as special student or to advanced standing, see p. 39.

GRADUATION

On the completion of courses of study aggregating a minimum of one hundred and twenty-four semester-hours, the University confers the degree of Bachelor of Arts and a Bachelor's Diploma in Education. These courses are partly prescribed and partly elective, and the degree is conferred when the necessary work has been completed, no time limit being set.

The prescriptions are as follows:

a. in general culture subjects:

	<i>Semester Hours</i>
Biology*.....	6
English.....	6
Foreign Language*.....	12
History*.....	12
Psychology and Logic.....	6
Philosophy.....	6

For the subjects marked with an asterisk (*) electives may be substituted to the extent that approved secondary school work has been done in them. The foreign language requirement must fall in one language, while in history it is required that a survey of the world's history be obtained.

b. In professional subjects the following twenty semester-hours are prescribed, although teachers of experience may receive credit for Observation and Practice Teaching.

	<i>Semester Hours</i>
History of Education.....	4
Principles of Education.....	2
Principles of Teaching.....	2
School Hygiene.....	2
Observation and Practice Teaching.....	4
Electives in Education.....	6

Graduates of approved normal schools may satisfy the requirement in the professional subjects by the completion of twelve semester-hours exclusive of the credits for Observation and Practice Teaching. These hours are elective with the advice and consent of the Dean.

c. All regular students must complete before graduation at least eighteen semester-hours in a major, and at least ten semester-hours in a minor subject, in addition to the first required course, if any, in the same subject.

THE TEACHER'S DIPLOMA

The Bachelor's Diploma in Education is granted in connection with the Bachelor of Arts degree (or, to students without experience in teaching, in connection with higher degrees) upon the fulfillment of the following conditions: (1) The student must have satisfactorily completed the courses of study defined above. (2) He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

A diploma corresponding to the degree is given also in connection with higher degrees, provided a graduate student has taken a major or minor in education, has satisfied the requirements *a*, *b* and *c* above, and has had at least two years of successful experience in teaching.

A student holding a degree from an approved college or university may, by satisfying requirements *a*, *b* and *c* above, earn a diploma without registering for a degree.

OBSERVATION AND PRACTICE TEACHING

Through the courtesy of the officials of the public schools, opportunities for observation and teaching are given in the high and elementary schools of Washington.

EXPERIMENTAL WORK

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation and for the study of methods and other practical educational problems.

TEACHERS APPOINTMENT BUREAU

Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the University, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers.

SCHEDULE OF CLASSES
IN
COLUMBIAN COLLEGE AND TEACHERS COLLEGE

Monday, Wednesday, Friday

	<i>Course</i>	<i>Instructor</i>
9.15	Education 20..... Principles of Teaching.....	Ruediger
	English 24..... Drama.....	Bolwell
	French 1..... First year French.....	Protzman
	Mathematics 3A..... Alg., Geom., Trig.....	Erwin
	Spanish 1A..... First Year Spanish.....	Patison
10.15	English 22..... Shakespeare's Comedies.....	Wilbur
	French 3A..... Second Year French.....	Henning
	German 20..... Literature.....	Schoenfeld
	Mathematics 9..... Trig., Analytic Geom.....	Erwin
	Philosophy 1, 3..... Psychology; Logic.....	Ruediger
	Pol. Science 1, 3..... U. S. Govt., State Govts.....	Hill
	Spanish 3..... Second Year Spanish.....	Patison
11.15	Economics 1..... General Economics.....	Kern
	German 3..... Second Year German.....	Schoenfeld
	Greek 2..... Xenophon, etc.....	Smith
	Physics 1..... General Physics.....	Brown
	Pol. Sci. 21, 22..... European Governments.....	Hill
1.45	English 36..... The Novel.....	Bolwell
	German 7..... Third Year German.....	Schoenfeld
	Latin 1..... Livy, etc.....	Smith
	Philosophy 23..... Laboratory Psychology.....	Metcalf
	Physics 3..... Introductory Physics.....	Brown
	Spanish 1B..... First Year Spanish.....	Protzman
2.45	Greek 1..... Herodotus, etc.....	Smith
	History 1, 2..... Medieval History.....	Swisher
4.00	English 30..... Types of Literature.....	Croissant
	French 5..... 19th-17th Century.....	Henning
	History 3, 4..... European History.....	Swisher
	Latin 2..... Cicero, etc.....	Smith
	Spanish 22..... Literature.....	Doyle
5.10	Commerce 40, 42..... Ind. Hist. of U.S.; World Pol.....	Kochenderfer
	English 2..... Rhetoric.....	Wilbur
	English 31..... Journalism.....	Chace
	English 56..... English Comedy.....	Croissant
	French 2A..... First Year French.....	Protzman
	French 7..... Conversational.....	Teillard
	French 28..... Literature from 1850.....	Henning
	French 50..... Old French.....	Doyle
	German 21..... Literature.....	Schoenfeld
	History 25..... English History.....	Churchill
	Mathematics 4..... Algebra; trig.....	Hodgkins, H. G.
	Mathematics 12..... Trig.; Anal. Geom.....	Erwin
	Philosophy 2, 4..... Psychology; Logic.....	Ruediger
	Physics 1..... General Physics.....	Brown
	Pol. Sci. 29, 30..... International Law; Diplom.....	Hill
	Portuguese 4..... Second Year Course.....	Coutinho
	Spanish 2A..... First Year Spanish.....	Patison
	Zoology 1..... Invertebrates.....	Bartsch

SCHEDULE OF CLASSES

69

	<i>Course</i>	<i>Instructor</i>
6.00	Commerce 36.....Commercial Geography.....	Kochenderfer
	Economics 2.....General Economics.....	Kern
	English 25.....Drama.....	Croissant
	English 52.....Shakespeare.....	Wilbur
	French 2B.....First Year French.....	Protzman
	German 4.....Second Year German.....	Schmidt
	History 30.....Amer. Constitutional Hist.....	McArthur
	Mathematics 6.....Alg., Geom., Trig.....	Hodgkins, H. G.
	Mathematics 12B.....Trig., Analytic Geometry.....	Erwin
	Physics 3.....Introductory Physics.....	Cheney
	Portuguese 1.....First Year Course.....	Coutinho
	Spanish 2B.....First Year Spanish.....	Patison
	Spanish 4A.....Second Year Spanish.....	Doyle
	Spanish 7.....Spanish Conversation.....	Saldana
	Zoology 2.....Vertebrates.....	Bartsch
Tuesday, Thursday, Saturday		
9.15	English 5.....English Literature.....	Bolwell
	French 1.....First Year French.....	Protzman
	French 3B.....Second Year French.....	Doyle
	History 21.....Ancient History.....	Kayser
	Mathematics 3B.....Alg., Geom., Trig.....	Erwin
	Mathematics 21.....Calculus.....	Hodgkins, H. L.
10.15	English 1.....Rhetoric.....	Wilbur
	English 26.....Poetry.....	Croissant
	Mathematics 24, 25.....Theory of Equations, etc.....	Erwin
	Philosophy 20, 21.....Hist. of Phil., Ethics.....	Richardson
11.15	English 29.....American Literature.....	Croissant
	German 1.....First Year German.....	Schoenfeld
	History 20.....American History.....	Alden
	Latin B.....Cicero and Vergil.....	Smith
12.00	Chemistry 1.....General Chemistry.....	McNeil
5.10	Architecture 28.....Painting and Sculpture.....	Bibb
	Chemistry 1.....General Chemistry.....	McNeil
	Commerce 20, 47.....Princ. of Business; Transp.....	Kochenderfer
	English 6.....English Literature.....	Bolwell
	Ethnology 50.....General Introduction.....	Michelson
	French 2C.....First Year French.....	Protzman
	French 2D.....First Year French.....	Kramer
	French 4A.....Second Year French.....	Henning
	German 2.....First Year German.....	Schmidt
	German 8.....Third Year German.....	Schoenfeld
	History 35.....General History.....	Swisher
	Mathematics 20.....Calculus.....	Hodgkins, H. L.
	Mathematics 54, 55.....Functions.....	Erwin
	Philosophy 6, 8.....Psychology; Logic.....	Metcalf
	Physics 23.....Electricity.....	Brown
	Pol. Sci. 27, 28.....International Relations.....	Hill
	Spanish 2C.....First Year Spanish.....	Patison
	Spanish 4B.....Second Year Spanish.....	Doyle
6.00	Architecture 20.....History of Architecture.....	Bibb
	French 2E.....First Year French.....	Cullom
	French 4B.....Second Year French.....	Kramer
	French 6.....Literature.....	Henning
	German 6.....Second Year German.....	Schmidt

	<i>Course</i>	<i>Instructor</i>
6.00	History 31, 32..... Modern European History..	Swisher
	Mathematics 12C... Trig., Analytic Geometry...	Erwin
	Pol. Science 2, 4.... U. S. Govt. State Govts....	Hill
	Spanish 2D..... First Year Spanish.....	Patison
	Spanish 6..... Third Year Spanish.....	Doyle

Tuesday and Thursday

10.15	Greek B.....	Homer.....	Smith	
	Philosophy 29, 21.....	Problems; Ethics.....	Richardson	
	Latin 20.....	Tacitus, etc.....	Smith	
	Physics 2, 4.....	Laboratory Physics.....	Brown	
11.15	Astronomy 1.....	Popular Astronomy.....	Erwin	
	Physics 9.....	Electricity.....	Brown	
1.15	{	Chemistry 2.....	Laboratory Practice.....	Swett
to		Chemistry 3.....	Organic Chemistry.....	Swett
4.15		Chemistry 7.....	Qualitative Analysis.....	Swett
1.45	Greek 21.....	Demosthenes, etc.....	Smith	
2.45	Physics 2, 4.....	Laboratory Physics.....	Brown	
4.00	Architecture 8.....	History of Architecture.....	Bibb	
	Classical Literature.....	Latin Literature.....	Smith	
	Education 21.....	Principles of Education.....	Ruediger	
	English 39.....	Composition.....	Bolwell	
5.10	Economics 22, 23.....	Sociology.....	Kern	
	Education 30.....	Story Telling.....	Albion	
	Education 50.....	Seminar.....	Ruediger	
	Philosophy 24.....	History of Philosophy.....	Richardson	
6.00	Commerce 33.....	Commercial Law.....	Alden	
	Economics 27, 26.....	Banking; Finance.....	Kern	
	Philosophy 50.....	Seminar in Psychology.....	Metcalf	
7.00	{	Chemistry 2.....	Laboratory Practice.....	Swett
to		Chemistry 3.....	Organic Chemistry.....	Swett
10.00		Chemistry 7.....	Qualitative Analysis.....	Swett
7.30	{			
to		Physics 2.....	Laboratory Physics.....	Brown
9.30				

Thursday and Saturday

5.10	Portuguese 2.....	Literature.....	Coutinho
6.10	Chemistry 24.....	Organic Chemistry.....	Swett

Monday and Wednesday

5.10	Ethnology 51.....	North America.....	Michelson
6.00	Philosophy 30, 32...	Problems; Ethics.....	Richardson
6.10	Chemistry 26.....	Physical Chemistry.....	McNeil
7.00	Chemistry 8.....	Organic Chemistry.....	McNeil

Monday and Friday

9.15	Economics 43, 44...	Trusts; Labor Problems...	Kern
11.15	Mathematics 50...	Differential Equations...	Hodgkins
4.00	Geology 21...	Engineering Geology...	Resser
5.10	Geology 1...	Mineralogy...	Bassler
	Geology 20...	Economic Geology...	Bassler
6.00	Geology 2...	Geology...	Bassler
7.30	} Physics 4...	Laboratory Physics...	Cheney
to			
9.30			

SCHEDULE OF CLASSES

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Wednesday and Friday

<i>Course</i>	<i>Instructor</i>
4.00 Archaeology 20.....History of Art.....	Carroll
4.50 Chemistry 23.....Organic Chemistry.....	Swett

Monday

5.10 Education 24.....School Sanitation.....	Small
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Tuesday

5.10 Pol. Sci. 26.....Brazil.....	Coutinho
6.10 Chemistry 6.....Metallurgy.....	McNeil

Wednesday

5.10 Education 27.....School Administration.....	Small
Geology 3.....Geography.....	Resser
Philosophy 27.....Recent Phi. Movements....	Richardson
6.00 Geology 4.....Physiographic Geography....	Resser

Thursday

2.45 Latin 22.....Latin Composition.....	Smith
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Saturday

9.15 Education 22.....History of Education.....	Ruediger
to Philosophy 25.....Laboratory Psychology.....	Metcalf
11.15 History 33.....Current History.....	Swisher

COURSES OF INSTRUCTION PROVIDED BY THE DEPARTMENT OF ARTS AND SCIENCES

Courses of instruction are divided into three sections.

First-section courses may be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degree; they serve, however, with additional work, as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses 20 to 49, inclusive; third-section courses, 50 and upwards. The number of hours, unless otherwise specified, indicate hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one semester; laboratory hours in chemistry and drawing count one-third unit each, in other subjects one-half unit each. Laboratories and drawing rooms will be open from 9.15 a. m. till 10 p. m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

Under each course is stated the number of credits for which the course is counted toward satisfying the requirements for the undergraduate degrees of Bachelor of Arts and Bachelor of Science, or for the graduate degrees of Master of Arts and Master of Science, or for the graduate degrees in engineering.

APPLIED MATHEMATICS

Second Section. For Undergraduates and Graduates.

20. *Analytical and Applied Mechanics.* (1) Statics: including composition, resolution and equilibrium of forces; center of gravity; moment of inertia. (2) Kinematics and Kinetics: including rectilinear, curvilinear and rotary motion; dynamics of machinery; work and energy; friction; impact. Four hours, first half-year. Four semester-hour credits.

21. *Hydraulics.*— The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Two hours. Four semester-hour credits. Professor LAPHAM.

22. *Mechanics of Materials and Theory of Elasticity*.—Including elastic and ultimate strength and deformation: simple cantilever and continuous beams, columns, torsion; combined stresses; compound columns and beams, including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours, second-half year. Four semester-hour credits.

ARCHAEOLOGY AND HISTORY OF ART

Second Section. For Graduates and Undergraduates.

20. *History of Art*.—An introductory course in the history of architecture, sculpture and painting, illustrated by photographs, lantern slides and casts. 1919-20, Prehistoric, Classical and Medieval Art; 1920-21, Renaissance and Modern Art. Wed., Fri., at 4. Four semester-hour credits. Professor CARROLL.

Third Section. Primarily for Graduates

50. *Pro-Seminary of Art and Archaeology*. (a) Prehistoric Art and Archaeology. Six semester-hour credits. Professor CARROLL. (b) History and Appreciation of Painting. Illustrated lectures on the schools of painting from the Renaissance down to the American school. Supplemented by courses of reading and visits to galleries in Washington and neighboring cities. Six semester-hour credits. Dr. BRIGHAM.

51. *American Archaeology*.—In conjunction with the School of American Archaeology in Santa Fé. Six semester-hour credits. Professor CARROLL and Dr. HEWETT.

Use is made of the illustrative material in the National Museum, the Library of Congress and the Corcoran Gallery of Art. Students are invited to the open meetings of the Art and Archaeology League, and the Washington Society of the Archaeological Institute of America.

ARCHITECTURE

2. *Freehand Drawing*.—This course consists of drawing in charcoal from casts of simple form. Two periods. Four semester-hour credits. Professor BIBB.

Credit for this course may also be obtained by taking work at the Corcoran Gallery of Art.

3. *Architectural Drawing and Elementary Design*.—This course includes the study of the elements of Architecture including the Five Orders, the use of india ink and water color rendering. At least nine hours per week are to be spent by the student in the drafting room. Six semester-hour credits.

Criticisms by Professor HARRIS on Tuesday and Thursday, 1.45 to 4.45 and by Assistant Professor BROWN on Tuesday, Wednesday and Friday evenings.

4. *Projections, Shades, Shadows and Perspective*.—A course in orthographic projections, shades and shadows, followed by a short course in the elements of perspective. Two periods. Four semester-hour credits.

Criticisms by Professor HARRIS on Tuesday 1.45 to 4.45 and by Assistant Professor BROWN on Wednesday evenings.

5. *Design*.—Problems of an elementary character are given to prepare the student for work in the Class B order of the Society of Beaux-Arts Architects; the rendering of these problems of this Society. At least twelve hours per week are to be spent by the student in the drafting room. Criticisms by Assistant Professor BROWN on Tuesday, Thursday and Friday evenings. Eight semester-hour credits.

6. *Free hand Drawing*.—An advanced course in drawing from cast and life. Two periods. Four semester-hour credits. Professor BIBB.

Credit for this course may also be obtained by taking work at the Corcoran Gallery of Art.

8. *History of Architecture*.—The course is designed to trace the development of the art in Ancient Egypt, in Greece, and in Rome, and through the Byzantine, and Mediaeval periods. *Tu., Th.*, at 4.00. Four semester-hour credits. Professor BIBB.

Second Section. For Undergraduates and Graduates.

20. *History of Architecture*.—A study of the Architecture of the Renaissance in its relation to Ancient and to Modern Architecture. *Tu., Th., Sat.*, at 6.00. Six semester-hour credits. Professor BIBB.

21. *Building Construction*.—Frame buildings, details of construction, interior finish, three-fourths scale and full-size details. *Wed., Fri.*, at 6.00 and two periods in drawing room; first half-year. Four semester-hour credits. Professor HARRIS.

22. *Sanitation*.—History of sanitation; pollution of water sources; modern plumbing practice; methods of sewage disposal, septic tank, sewage disposal fields, etc. *Wed., Fri.*, at 5.10; first half-year. Two semester-hour credits. Professor HARRIS.

24. *Pen-and-Ink Rendering*.—A study of the renderings of the best pen-and-ink draftsmen, with practice in the use of the pen as a means of Architectural expression. One period. Two semester-hour credits.

Hours of criticism selected by conference with Assistant Professor BROWN.

25. *Design*.—Plan problems, sketch problems, and archaeology problems from the Class B plan programs of the Society of Beaux-Arts Architects. At least fifteen hours a week are to be spent by the student in the drafting room. Ten semester-hour credits. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

27. *Advanced Design*.—Plan problems and sketch problems are given from the Class A programs of the Society of Beaux-Arts Architects. The latter part of the year is devoted to a thesis, the subject being selected by the student, subject to the approval of the Professor of Design. At least eighteen hours a week are to be spent by the student in the drafting room. Twelve semester-hour credits. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

28. *History of Sculpture and Painting*.—An advanced course offering a comparative study of the development of art as the expression of civiliza-

tion; an outline of the lives of great artists and a critical analysis of their achievement. *Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor BIBB.

33. *Water Color*.—A course of drawing in water color from still life and from buildings and gardens. Two periods. Four semester-hour credits. Professor BIBB.

39. *Building Construction*.—Masonry foundations, pile foundations stone work, brick work, fire-proofing, ornamental terra cotta, plastering, specifications. *Wed., Fri.*, at 6.00 and two periods in the drawing room, second half-year. Four semester-hour credits. Professor HARRIS.

40. *Water Color*.—An advanced course in water color drawing including studies from life. Two periods. Four semester-hour credits. Professor BIBB.

41. *Heating and Ventilating*.—Elementary principles of heating and ventilating; details of installation of hot air, hot water, and steam heating plants. *Wed., Fri.*, at 5.10; second half-year. Two semester-hour credits. Professor HARRIS.

43. *Office Practice*.—A course of lectures on office practice, business methods of an architect and special types of buildings by the teaching staff and practicing architects of the District of Columbia. Two semester-hour credits.

44. *Advanced Construction*.—A course arranged especially for architectural students, embracing problems in the determination of beam sizes, girder and column design, grillage beam footings and the design of the simpler forms of trusses. Four semester-hour credits. Professor HARRIS.

ASTRONOMY

First Section. Primarily for Undergraduates.

1. *Popular Astronomy*.—A course in elementary descriptive astronomy designed to give facts of general interest without the use of higher mathematics. Recitations, lectures and papers on special topics assigned to each student. *Tu., Th.*, at 11.15. Four semester-hour credits. Professor ERWIN.

2. *A Course in Practical Astronomy for Civil Engineering Students*.—Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit. Two hours during one term. Two semester-hour credits. Professor LAPHAN.

Third Section. Primarily for Graduates.

58. *Celestial Mechanics*.—Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. Six semester-hour credits. Professor HALL.

ASTRO-PHYSICS

Third Section. Primarily for Graduates.

54. A lecture course on the astro-physical instruments employed in modern research. Six semester-hour credits. Mr. FOWLE.

55. Some applications of Astrophysics, Geophysics, Chemical Physics and Colloidal Physics to Meteorology. Six semester-hour credits. Mr. FOWLE.

CHEMISTRY

First Section. Primarily for Undergraduates.

1. *General Chemistry*.—A series of illustrated lectures, accompanied by exercises and tests on theoretical, inorganic, organic and technical chemistry. Section A. Tu., Th., Sat., at 12.00. Section B. Tu., Th., Sat., at 5.00. Six semester-hour credits. Professor McNEIL.

2. *Laboratory Practice*.—A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiment. Two three-hour periods. Tu., Th., at 1.15 or at 7. Four semester-hour credits. Professor McNEIL and Professor SWETT.

3. *Preparation and Study of the Properties of Chemical Substances*.—A laboratory course. Two three-hour periods. Tu., Th., at 1.15 or at 7. Four semester-hour credits. Professor McNEIL, Professor SWETT, Mr. VALAER.

4. *Assaying and Metallurgy of the Precious Metals*.—Carried on by the method used by the Government Assayers, the Laboratory being fitted up on the plan of that of the United States Mint. Twelve hours for three months. Professor McNEIL, Professor SWETT.

5. *Principles of Analysis*.—Lecture. One hour. Two semester-hour credits. Professor McNEIL.

6. *Metallurgy of Iron and Steel*.—A course of lectures and readings. Tu., at 6.10. Two semester-hour credits. Professor McNEIL.

7. *Qualitative Analysis*.—A brief course intended primarily for students in engineering. Two three-hour periods. Tu., Th., at 1.15 or at 7. Four semester-hour credits. Professor McNEIL, Professor SWETT, Mr. VALAER.

8. *Elementary Organic Chemistry*.—A lecture and laboratory course including both the aliphatic and aromatic series of compounds. Two lectures and three hours laboratory work per week. Mon., Wed., at 7. Six semester-hour credits. Professor McNEIL.

Second Section. For Undergraduates and Graduates.

20. *Qualitative Analysis*.—A laboratory course in the study of properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Six Semester-hour credits. Professor McNEIL, Professor SWETT, Mr. VALAER.

21. *Quantitative Analysis*.—A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Eight semester-hour credits. Professor McNEIL, Professor SWETT, Mr. PHILLIPS.

23. *Organic Chemistry*.—Advanced course. Wed., Fri., at 4.50. Four semester-hour credits. Professor SWETT.

24. *Organic Chemistry*.—Advanced course. A continuation of Course 23. Th., Sat., at 6.10. Four semester-hour credits. Professor SWETT.
25. *Chemistry of the Carbon Compounds*.—A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Eight semester-hour credits. Professor McNEIL, Professor SWETT, Mr. LEPPER.
26. *Physical Chemistry*.—A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. Special attention is given to the ionic theory, electro-chemistry, colloids, the law of mass action, and the phase rule. Mon., and Wed., at 6.10. Four semester-hour credits. Professor McNEIL.
27. *Stereo-Chemistry*.—This course deals with the arrangement of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Four semester-hour credits. Assistant Professor HILL.
28. *Biochemistry*.—A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Six semester-hour credits. Assistant Professor LEFFLER.
29. *Industrial Chemistry*. This course deals with the manufacture of substances styled "chemicals" and with the application of chemistry to the arts and industries. Six semester-hour credits. Not given in 1920-21.
30. *Physical Chemistry*.—A laboratory course, designed to illustrate and supplement Chemistry 26; and especially adapted to the needs of those students who have taken, or are taking that course. Two three-hour periods. Four semester-hour credits. Assistant Professor HILL.

Third Section. Primarily for Graduates.

50. *Explosive Substances*.—Ten semester-hour credits. Professor CUSHMAN.
51. *Analytical Methods*.—Six semester-hour credits. Additional credits may be earned by special arrangement. Professor McNEIL.
53. *Development of the Theory of the Constitution of the Natural Silicates*.—Six semester-hour credits. Professor CLARKE.
55. *Special Researches in Electro-Chemistry*.—Six semester-hour credits. Assistant Professor Hopkins.
57. *Research in Physical Chemistry*.—Six semester-hour credits. Additional credits may be earned by special arrangement. Professor McNEIL.
- Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington which are held on the second and fourth Thursdays of each month, from October to May, in the Assembly Hall of the Cosmos Club, at 8 p. m., and also the meetings of the Chemical Society of the George Washington University which is a most active and efficient student organization.

CIVIL ENGINEERING

First Section. Primarily for Undergraduates.

1. *Surveying and Mapping.*—This course includes recitations, field and drawing room work. The recitations will cover the theory, adjustment and use of instruments; land, topographic, hydrographic and geodetic surveying; latitude, longitude, time and azimuth. The field work includes the adjustment of and the use of the level, and transit. The computations cover the closing of traverses, computation of areas, contour problems and the reduction and plotting of field notes. Two recitations a week; field and drawing room work equivalent to one three-hour period a week throughout the year. Six semester-hour credits. Professor Lapham and Mr. MARSH.

2. *Railroad Engineering.*—This course includes recitations, field and drawing-room work. The recitations cover railroad curves and earth-work, methods of location and construction of railway lines. The field work consists of a preliminary and location survey; the laying out of circular and transition curves, etc. The computations and mapping consist of making an estimate of quantities and cost of a piece of line, making maps, profiles and a mass diagram. Two lecture-recitations and one three-hour field or drawing period a week throughout the year. Six semester-hour credits. Professor LAPHAM.

3. *Highways and Pavements.*—This course comprises the study of highway economics, location, construction and maintenance; the various methods of surfacing; the materials used and the standard tests of these materials. A study is also made of the methods of street paving, street grades, etc. Two hours a week. Four semester-hour credits. Mr. MARSH.

4. *Materials of Construction.*—A course in the study of the chemical and physical properties of: stone, brick, lime, wood, iron, steel and a few of the minor alloys. Stress is laid on the manufacture and the properties of the materials that affect their use in engineering construction. The class-room work is supplemented by laboratory tests and by inspection trips to testing laboratories and manufacturing plants. Two hours a week. Four semester-hour credits. Professor LAPHAM.

5. *Surveying Instruments.*—A two-month's course for mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours. One semester-hour credit. Professor LAPHAM.

6. *Foundations.*—A two-month's course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours. One semester-hour credit. Professor LAPHAM.

Second Section. For Undergraduates and Graduates.

21. *Hydraulic Engineering.*—The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans;

distributing system; water rights and irrigation law. Two lectures and one design period. Six semester-hour credits. Professor LAPHAM.

22. *Structures*.—A course covering the determination of stresses in framed structures and their deflection by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods. Ten semester-hour credits. Mechanical engineering students take only the first term. Five semester-hour credits.

23. *Structures*.—The design of structures in timber, steel and masonry; timber trestles, roof trusses and slow-burning construction; steel mill and office buildings; girder, riveted and pin-connected bridges; bridge piers, abutments and similar structures; theory of foundation pile and pile driving, caissons and cofferdams. Three lectures and two design periods. Ten semester-hour credits.

24. *Sanitary Engineering*.—Water supply; the collection, storage and distribution of water; the design and construction of dams, reservoirs and storage tanks; construction and maintenance of water distributing systems; pumping machinery; quality of water; interpretation of water analyses; sedimentation and aeration of water; sand filtration; mechanical filtration; chemical treatment of water; the relation of water supply to infectious diseases.

Sewerage; sewerage and drainage systems; methods of disposal of sewage and trade wastes; treatment of sewage; garbage and refuse disposal. Three lectures and one design period. Eight semester-hour credits. Professor LAPHAM.

27. *Reinforced Concrete Construction*.—The theory and design of reinforced concrete slabs, beams, columns, foundations and walls; estimating reinforced concrete work. Two recitations and one design period. Six semester-hour credits. Professor LAPHAM.

Third Section. Primarily for Graduates.

50. *Reinforced Concrete Structures*.—Theory and design; buildings, bridges, retaining walls, dams, tanks, etc. One lecture and two design periods. Six semester-hour credits.

51. *Advanced Steel Structures*.—Theory and design of suspension, cantilever, moveable and arch bridges. One lecture and two design periods. Six semester-hour credits.

53. *Railroad Engineering*.—An advanced course in railroad location construction and maintenance of way. It must be preceded by Civil Engineering course 2. Six semester-hour credits.

54. *Water and Sewage Purifications*.—An advanced course dealing with the practical application of the principles and methods involved in the purification of water supplies and in the disposal and treatment of sewage. One lecture and two design periods. Six semester-hour credits.

CLASSICAL LANGUAGES AND LITERATURES

Greek

First Section. Primarily for Undergraduates.

A. *Elementary Course*.—For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. *Mon., Wed., Fri.*, at 10.15. Six semester-hour credits. Not given in 1920-21.

B. *Homer: Iliad I-IV*.—For students who have taken course A and desire to prepare themselves to enter Course 1. *Tu., Th.*, at 9.15. Four semester-hour credits. Professor SMITH.

1. Herodotus (selections); Lysias (selected orations); Euripides (*Alcestis*); Greek prose composition. *Mon., Wed., Fri.*, at 2.45. Six semester-hour credits. Professor SMITH.

2. Xenophon (*Memorabilia*); Thucydides (*Book VII*); Sophocles (*Antigone*). *Mon., Wed., Fri.*, at 11.15. Six semester-hour credits. Professor SMITH.

Second Section. For Undergraduates and Graduates

20. Plato (selections, including the *Apology* and *Crito*); Aristophanes (*Clouds* or *Frogs*). *Tu., Th.*, at 1.45. Four semester-hour credits. Not given in 1920-21.

21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections). *Tu., Th.*, at 1.45. Four semester-hour credits. Professor SMITH.

Latin

First Section. Primarily for Undergraduates.

B. *Cicero's Orations and Vergil's Aeneid*.—For students who have satisfied the admission requirements in elementary Latin but have not done the work specified under the advanced requirements. It will include a thorough study of several of the *Orations* and of three or four books of the *Aeneid*, supplemented by private reading, and some practice in the writing of Latin. *Tu., Th., Sat.*, at 11.15. Six semester-hour credits. Professor SMITH.

1. Livy (*Book I* or *XXI*); Cicero (*De Senectute*); Horace (*Odes* and *Epodes*); Latin prose composition. Open to students who have satisfied the admission requirements in elementary and advanced Latin, or have satisfactorily completed course B. *Mon., Wed., Fri.*, at 1.45. Six semester-hour credits. Professor SMITH.

2. Cicero and Pliny (selected Letters); Horace (*Satires* and *Epistles*); Martial (selections). *Mon., Wed., Fri.*, at 3.45. Six semester-hour credits. Professor SMITH.

Second Section. For Undergraduates and Graduates.

20. Tacitus (selections); Terence (*Phormio*); Plautus (*Captivi*). *Tu., Th.*, at 10.15. Four semester-hour credits. Professor SMITH.

21. Quintilian, *Book X*, and Horace, *Ars Poetica*; Catullus, Tibullus and Propertius. *Tu., Th.*, at 10.15. Four semester-hour credits. Not given in 1920-21.

22. *Advanced Latin Composition and Reading at Sight*.—Practice in Latin expression and style. *Th.*, at 2.45. Two semester-hour credits. Professor SMITH.

Third Section. Primarily for Graduates.

The work in this section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

50. *Vergil, and Roman Epic Poetry*.—Two hours. Six semester-hour credits. Not given in 1920-21.

51. *Caesar, and the Roman Historians*.—Two hours. Six semester-hour credits. Professor SMITH.

52. *Cicero, and Roman Oratory*.—Two hours. Six semester-hour credits. Not given in 1919-20.

Classical Literature

First Section. Primarily for Undergraduates.

1. *General Survey of Classical Greek Literature (in English)*.—This course is designed to give an outline of the development of the different departments of literature in ancient Greece and will include selected readings, in translation, from the most important authors. Being primarily intended for students who are not taking Greek or Latin, it does not require a knowledge of those languages, and is open to all undergraduates as an elective. *Tu., Th.*, at 4. Four semester-hour credits. Professor SMITH.

2. *General Survey of Latin Literature (in English)*.—This course is similar in purpose and method to Course 1, and will alternate with it. The subject of study will be the work of the most important ancient Roman authors. *Tu., Th.*, at 4. Four semester-hour credits. Not given in 1920-21.

COMMERCE

Second Section. For Undergraduates and Graduates.

20. *Principles of Business*.—An introductory course in Business Economics and preparatory to the courses in Corporation, Finance, Transportation, Business Administration, etc. The following topics indicate the scope of the course, viz: Financing and management of business enterprises; purchasing; advertising; selling; ocean traffic and freight trade; credit; forecasting business conditions; banking; exchange; financial statements. *Tu., Th., Sat.*, at 5.10. First half-year. Three semester-hour credits. Assistant Professor KOCHENDERFER.

33. *Commercial and Maritime Law*.—A study of the principles of the law relating to commercial transactions, especially contracts, sales, bailments, agency, partnership, negotiable instruments, and common carriers, with

some study of Admiralty law. Section A, *Tu., Th.*, at 11.15; Section B, *Tu., Th.*, at 6.00. Four semester-hour credits. Assistant Professor ALDEN.

36. *Commercial and Industrial Geography*.—During the first term, a general survey is made of the products, industries, and commerce of the United States and of the principal foreign countries. This survey is supplemented during the second term by a detailed study of agriculture, mining, and manufactures throughout the world, but with special reference to the United States; separate treatment of each important crop and branch of manufactures, with inquiry into the causes of the localization of industry, *Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Assistant Professor KOCHENDERFER.

40. *Industrial and Commercial History of the United States*.—Business aspects of early American colonization; the westward movement and the public lands; the development of internal improvements and railways; tariff history and policy. Growth of industry, agriculture, commerce; labor and capital; industrial and commercial problems of today. *Mon., Wed., Fri.*, at 5.10. First half-year. Three semester-hour credits. Assistant Professor KOCHENDERFER.

42. *European Industrial Evolution and World Politics*.—A somewhat detailed study of the awakening of Japan, the problem of China, the interplay of rival imperial ambitions in the Far East, the causes of the World War, the Versailles Peace Conference and the international settlement made thereby. The introductory portion of the course will cover as intensively as time will permit agrarian problems, colonial expansion, and commercial policies, the development of industry, and transportation. *Mon., Wed., Fri.*, at 5.10. Second half-year. Three semester-hour credits. Assistant Professor KOCHENDERFER.

45. *History of Commerce*.—The rise and progress of commerce from antiquity to modern times, with particular emphasis on the effects of commerce on civilization and the relations between commercial and political development. Not given in 1920-21. Assistant Professor KOCHENDERFER.

47. *Transportation*.—Development and control of transportation in the United States and Europe. Railroad construction, competition, combination, regulation, rates discrimination. Government ownership. Ocean carriage; subsidies; combination; rebates; ports and terminals; marine insurance. The U. S. Shipping Board, Railroad Administration and Emergency Fleet Corporation activities. *Tu., Th., Sat.*, at 5.10. Second half year. Three semester-hour credits. Assistant Professor KOCHENDERFER.

48. *Relation of Government to Property and Industry*.—Incorporation and regulation of companies, common law and monopolies, the anti-trust acts and their results. Public Utilities commissions and boards; regulations of security issues, etc. National incorporation and other methods of proposed

regulation examined. Reconstruction problems. The tendency toward federal control of commerce and industry. Police power regulations, etc. Not given in 1920-21.

Third Section. Primarily for Graduates.

52. *Corporation Finance and International Trade Seminar.*—For qualified advanced students and graduates. Special opportunities will be offered students desiring to acquaint themselves with the best literature and do intensive work in the preparation of theses. Hours to be arranged. Four semester-hour credits. Assistant Professor KOCHENDERFER.

Note.—Additional courses in commerce may be given in 1920-21, and there may be resulting changes in class hours. Announcements of the changes will be made in September.

ECONOMICS AND SOCIOLOGY

First Section. Primarily for Undergraduates.

1. *General Economics.*—An outline course in the principles of political economy devoted mainly to the study of production and exchange under present-day conditions, followed by a study of the problems of rent, interest, wages, and profits, and including an examination of competition, private property, and economic programs. *Mon., Wed., Fri., at 11.15.* Six semester-hour credits. Professor KERN.

2. Parallel with Course 1. *Mon., Wed., Fri., at 6.00.* Six semester-hour credits. Professor KERN.

Second Section. For Undergraduates and Graduates.

22. *General Sociology.*—An outline course in the principles of sociology devoted mainly to an examination of the organization of society and its ideals, with a study of the social systems, their functions, efficiencies and programs for their development. First half-year. *Tu., Th., at 5.10.* Two semester-hour credits. Professor KERN.

23. *Modern Social Problems.*—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year. *Tu., Th., at 5.10.* Two semester-hour credits. Professor KERN.

24. *The History of Economic Thought.*—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. Given in alternate years. Not given in 1920-21. Professor KERN.

26. *Public Finance.*—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State Governments. The theory of taxation; administration of public domains, and industries; public debts. Second half-year. *Tu., Th., at 6.00.* Two semester-hour credits. Professor KERN.

27. *Money and Banking.*—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system

to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. First half-year. *Tu., Th.*, at 6.00. Two semester-hour credits. Professor KERN.

28. *Economic Problems*.—An advanced course devoted to a more thorough study of the problems developed in the general course in economics. Research and preparation of papers to be presented to the class for discussion and criticism. Credit for course 1, General Economics, is requisite for admission to this course. Not given in 1920-21. Professor KERN.

43. *Combinations, Trusts*.—A discussion of the conditions which have favored the growth of large business combinations, the nature of their organization, their influence upon prices and productive efficiency, and the regulation and supervision of them. First half-year. *Mon., Fri.*, at 9.15. Two semester-hour credits. Professor KERN.

44. *Labor Problems*.—A brief sketch of the labor movement in the United States and of the aims and methods of trade unions, followed by a discussion of such problems as: child labor; dangerous occupations; workingmen's insurance against sickness, old age, accidents, and unemployment; strikes and industrial conflicts; conciliation and arbitration; collective bargaining. Second half-year. *Mon., Fri.*, at 9.15. Two semester-hour credits. Professor KERN.

49. *Statistics*.—The elements of statistical method, including gathering material, collecting data, defining the problem, tabulation, diagrams, graphs, frequency tables, types including mean, median, mode, measure of dispersion, use of quartiles, average deviation, standard deviation, coefficient of variability, skewness, coefficient of correlation, probable error, price indices, ratio of variation, moving averages, and general application of statistical methods to business, economics, education, administration, sociology, government and biology. Three hours a week. Six semester-hour credits. Dr. PHILLIPS.

Third Section. Primarily for Graduates.

51. *Seminar in Sociology*.—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Six semester-hour credits. Professor KERN.

Note.—Additional courses in Economics may be given in 1920-21, and there may be resulting changes in class hours. Announcements of the changes will be made in September.

EDUCATION

Second Section. For Undergraduates and Graduates.

20a. *Principles of Teaching*.—A comprehensive course in the principles underlying the teaching process in its intellectual, emotional and motor phases. Special attention is given to making teaching concrete and meaningful. First half-year. *Mon., Wed., Fri.*, at 9.15. Three semester-hour credits. Professor RÜDIGER.

20b. *Principles of Education*.—A comprehensive course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. Second half-year. *Mon., Wed., Fri.*, at 9.15. Three semester-hour credits. Professor RUEDIGER.

21a. *Principles of Teaching*.—A brief course in the psychological and logical principles underlying the teaching process. First half-year. *Tu., Th.*, at 4. Two semester-hour credits. Professor RUEDIGER.

21b. *Principles of Education*.—A brief course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. Second half-year. *Tu., Th.*, at 4. Two semester-hour credits. Professor RUEDIGER.

(Courses 20 and 21 should be preceded or accompanied by general psychology. Course 21 is designed especially for teachers in service.)

22. *History of Education*.—A general course in the historical development of educational theory and practice. *Sat.*, 9.15-11.15. Four semester-hour credits. Professor RUEDIGER.

24. *School Sanitation and Hygiene*.—A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; school-house construction and sanitation. Lectures, reference work, and reports. *Mon.*, at 5.10. Two semester-hour credits. Dr. SMALL.

25. *Secondary Education*.—After sketching the meaning and significance of secondary education as revealed by educational theory, by the secondary schools of Germany, France, and England, and by the history of secondary education in America, the course will consider in some detail the educational values, essential content, and methods of teaching the various high school branches. The problems of essential minima, of the connection of the studies with life, and of the development of initiative in the student will be emphasized. Not given in 1920-21. Four semester-hour credits. Dr. SMALL.

27. *School Administration*.—The public school system: Its development; economic and political relations; organization of administration, financial and educational; problems of administration. Lectures, assigned reading, and reports. *Wed.*, at 5.10. Dr. SMALL.

28. *Experimental Education*.—A laboratory course on processes of learning, transfer of practice, association, memory, etc. Special emphasis is laid upon practical work with the Binet and other mental tests. (Not given in 1920-21. See Philosophy 25.) Three semester-hour credits. Mrs. SYMONDS.

29. *Educational Story Telling*.—Study of type stories, adaptation of stories, practical story telling. It is the purpose of the course to develop a basis for the selection and presentation of suitable children's literature,

taking into consideration the various stages of the child's development. Lectures, required reading and reports. Not given in 1920-21. Four semester-hour credits. Mrs. ALBION.

30. *Story Telling and Children's Literature*.—Study of Epics—Iliad, Odyssey, and Kalevala. Re-telling, possible dramatization.

Part of the course will be given to a discussion of reading and reading books with a view to supplementing with stories and units of literature. It will be the purpose to work toward a solution of the problem of developing in the child a higher appreciation of the best in literature and a real love of books through his school reading. The course will extend and supplement Course 29 but will be open to all upper class students. Tu., Th., at 5.10. Four semester-hour credits. Mrs. ALBION.

34. *Observation*.—Observation of experienced teachers, under guidance, followed by discussion. The course should normally be taken in the junior year. Two semester-hour credits. Professor RUEDIGER.

35. *Practice Teaching*.—Teaching under supervision and criticism. The course should normally be taken in the senior year. Two semester-hour credits. Professor RUEDIGER.

Third Section. Primarily for Graduates.

50. *Seminar in Education*.—Topic for 1920-21: Educational Psychology. Special attention will be given to mental and educational tests, and a paper embodying constructive scholarship will be required of each member of the class. Open to qualified undergraduates. Tu., Th., at 5.10. Six semester-hour credits. Professor RUEDIGER.

ELECTRICAL ENGINEERING

First Section. Primarily for Undergraduates.

1. *Mathematical Theory of Electricity and Magnetism*.—The fundamental units and formula of electricity and magnetism are studied so that the student may have a clear conception of the terms used in Electrical Engineering and Electric Design. This is an elementary subject leading to advanced studies, which require the understanding of certain groundwork principles. Prerequisite: Physics 1. Two hours, first half-year. Two semester-hour credits.

2. *Direct Current Theory; Dynamo Machinery and Alternating Currents*.—During the first half of the year the elements of electricity are studied, together with the principles involved in the construction and operation of direct current dynamos and motors. After a foundation of the elements of electricity has been established, direct current machines are examined, resulting in the discussion of the different forms of armatures, of their windings, cores, commutator, the various fields, the methods of arranging the windings for different purposes; the shape and materials of magnetic circuits; and the selection of types suited for performances of specific duties.

During the second half of the year, direct current machines are further studied, illustrating the characteristic curves and efficiencies of the different

types. An introduction to the characteristics of alternating currents are taken up, together with the solutions of simple and complex circuits. Numerous problems are assigned throughout the course. Prerequisite: Physics 1. Three hours. Six semester-hour credits.

3. *Electric Design*.—A course covering the design of simple electrical apparatus. The various materials used in the construction of electrical machinery are considered from the standpoint of magnetic and mechanical properties. Much of the time is devoted to calculations and the application of the principles taught in E. E. 1. Prerequisite: E. E. 1. Two hours, second half-year. Two semester-hour credits.

4. *Electrical Laboratory*.—A laboratory course for Juniors, involving experiments on measurements and tests of direct current machines. Ample instruction is given so that the student may gain a clear knowledge of the object of the experiment and so that no important point may be overlooked. Complete and concise reports describing each experiment and showing the results of the various tests are required from all students. Two three-hour periods, first half-year. Two semester-hour credits.

5. *Electrical Laboratory*.—A continuation of E. E. 4, in which further tests on direct current machines are made, involving a study of the performance characteristics of the different types. Prerequisite: E. E. 4. Two three-hour periods, second half-year. Two semester-hour credits.

6. *Industrial Electricity*.—A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery and appliances. Prerequisite: Physics 1. Two hours, first half-year. Two semester-hour credits.

Second Section. For Undergraduates and Graduates.

21. *Alternating Current Theory and Machinery*.—A continuation of E. E. 2, covering the principles of simple and polyphase currents, including study of alternators, synchronous converters, induction motors, synchronous motors, transformers, etc. Four hours. Eight semester-hour credits.

22. *Electrical Distribution*.—A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Ferguson's Elements of Electrical Transmission. One hour. Two semester-hour credits.

23. *Electrical Applications*.—A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as electric generating stations, motive power, electro-metallurgy, etc. One hour. Two semester-hour credits.

24. *Advanced Electrical Laboratory*.—Determination of inductance, impedance, condensance, etc. Measurement of power in alternating current circuits. Regulation and efficiency tests of alternators, and transformers. Tests of induction and repulsion motors. Two three-hour periods. Four semester-hour credits.

25. *Inspection of Plants and Industrial Works*.—In the vicinity of Washington and Baltimore are a number of modern electric lighting and street

railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written description submitted by the students.

27. *Electric Railways*.—A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours, second half-year. Two semester-hour credits.

28. *Telephones and Telegraphs*.—Special applications of electricity to telephony and telegraphy are taught, with details and construction of instruments, switchboards and line work. This includes a study of telephone transmitters and receivers, circuits, etc. Two hours, first half-year. Two semester-hour credits.

29. *Electric Illumination*.—A study of the underlying principles of scientific illumination, exterior and interior. Color combinations, control, absorption, and reflection are considered. Detail study is also made of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours, second half-year. Two semester-hour credits.

Third Section. Primarily for Graduates.

50. *Radio-electricity*.—A mathematical treatment of the fundamental principles with an exposition of their application to present day practice. Problems based on the methods used and the apparatus employed in the generation of oscillatory currents; the reception of signals; and other features developed in the utilization of this method of transmission will be discussed. Six semester-hour credits, as a Minor, ten semester-hour credits, as a Major. Professor COHEN.

ENGLISH

First Section. Primarily for Undergraduates.

1. *English Rhetoric*.—A study of the principles of self-expression through language with practice in composition. Tu., Th., Sat., at 10.15. Six semester-hour credits. Professor WILBUR.

2. *English Rhetoric*.—Parallel with Course 1. Mon., Wed., Fri., at 5.10. Six semester-hour credits. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English except 5 and 6.

5. *Survey of English Literature*.—Tu., Th., Sat., at 9.15. Six semester-hour credits. Assistant Professor BOLWELL.

6. *Survey of English Literature*.—Parallel with Course 5. Tu., Th., Sat., at 5.10. Six semester-hour credits. Assistant Professor BOLWELL.

Second Section. For Undergraduates and Graduates.

22. *Shakespeare*.—The Comedies. (The Temple edition of Shakespeare is recommended.) Mon., Wed., Fri., at 10.15. Six semester-hour credits. Professor WILBUR.

24. *English Drama to 1642*.—From the beginning exclusive of Shakespeare to the closing of the theater. *Mon., Wed., Fri.*, at 9.15. Six semester-hour credits. Assistant Professor BOLWELL.

25. *English Drama from 1642*.—*Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Professor CROISSANT.

26. *Nineteenth Century English Poetry*.—*Tu., Th., Sat.*, at 10.15. Six semester-hour credits. Professor CROISSANT.

27. *Humanistic Studies*.—The drama since 1890. *Tu., Th., Sat.*, at 10.15. Six semester-hour credits. Not given 1920-1921. Mr. WOODMAN.

28. *Humanistic Studies*.—Nineteenth Century English poetry. Six semester-hour credits. Not given 1920-1921. *Mon., Wed., Fri.*, at 4.00. Mr. WOODMAN.

29. *American Literature*.—Lectures and collateral reading. *Tu., Th., Sat.*, at 11.15. Six semester-hour credits. Professor CROISSANT.

30. *Types of Literature*.—Lectures on the principal types of literature with collateral reading. *Mon., Wed., Fri.*, at 4.00. Six semester-hour credits. Professor CROISSANT.

31. *Journalism*.—The fundamentals of newspaper writing. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Mr. CHACE.

33. *American Literature*.—*Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Not given 1920-1921. Mr. WOODMAN.

36. *The Development of the Novel*.—*Mon., Wed., Fri.*, at 1.45. Six semester-hour credits. Assistant Professor BOLWELL.

39. *Advanced Composition*.—*Tu., Th.*, at 4.00. Four semester-hour credits. Assistant Professor BOLWELL.

Third Section. Primarily for Graduates.

51. *English Seminar*.—Problems for individual research. Six semester-hour credits.

52. *Shakespeare*. All the plays.—*Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Professor WILBUR.

55. *Shakespeare*.—The Comedian. *Tu., Th.*, at 5.10. Four semester-hour credits. Not given in 1920-1921. Professor WILBUR.

56. *English Comedy*.—The development of English Comedy with particular attention to the rise of Romantic Comedy before Shakespeare, and sentimental comedy in the eighteenth century. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Professor CROISSANT.

ETHNOLOGY

Third Section. Primarily for Graduates.

50. *General Introduction to Ethnology*.—A general course embracing man's place in nature; ancient man; the elements of physical anthropology; classification of living races; sociology; religious ideas; ethical ideas, and languages of primitive peoples; the beginnings of literature and art; linguistic survey of the world; ethnological survey of the world; discussion of the problems of

independent origins versus diffusion; the classical British, Graebnerian, and American schools. Lectures and collateral readings. *Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor MICHELSON.

51. *Outlines of North-American Ethnology*.—As full a description of the aborigines of North America as the time will permit. Lectures and assigned readings. *Mon., Wed.*, at 5.10. Four semester-hour credits. Professor MICHELSON.

52. *American Indian Languages*.—This is an introductory course, and presupposes only a moderate amount of previous linguistic training. After a brief introduction to the subject, two stocks will be studied, one in each half-year. *Two hours a week*. Four semester-hour credits. Given in 1920-1921 only if taken by at least three students. Professor MICHELSON.

53. *American Indian Languages* (second course).—This is an advanced course, and members must have taken course 52, unless they have done an equivalent elsewhere. *One hour a week*. Two semester-hour credits. Given if taken by at least three students. Professor MICHELSON.

54. *Seminar in Ethnology*.—Competent students will be assigned topics, and the results discussed at a weekly meeting. Four semester-hour credits. This course may be taken four times, counting each time. The subject-matter will be changed yearly. This will be in accordance with the needs of individual students. Professor MICHELSON.

FRENCH

See Romance Languages.

GEOLOGY AND MINERALOGY

First Section. Primarily for Undergraduates.

1. *Mineralogy*.—Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. Text Book: *Mineralogy, Crystallography, and Blowpipe Analysis* by Moses and Parsons. *Mon., Fri.*, at 5.10. Four semester-hour credits. Professor BASSLER and Dr. RESSER.

2. *Geology*.—Systematic geology; dynamical, structural, and stratigraphical. The course is designed to form a part of a general-culture course or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text book: *Cleland's Geology*. *Mon., Fri.*, at 6.00. Four semester-hour credits. Professor BASSLER and Dr. RESSER.

3. *General Geography*.—This course presents the principles of geography by a study of the phenomena of the earth as a whole, the interrelations of these phenomena and their influence upon human affairs. It consists of

two parts, first, a study of the general geographic principles, and second, a brief survey of several regions and countries for the application of these principles. It is a general culture lecture course illustrated by charts and lantern slides. No course is prerequisite. *Wed.*, at 5.10. Two semester-hour credits. Dr. RESSER.

4. *Physiographic Geography*.—A general culture, illustrated lecture course treating of the physical phases of geography, the earth's surface, atmosphere, and the distribution of life. *Wed.*, at 6.00. Two semester-hour credits. Dr. RESSER.

Second Section. For Undergraduates and Graduates.

20. *Economic Geology*.—[Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and minerals used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Lindgren's *Mineral Deposits*. *Mon., Fri.*, at 5.10. Given in alternate years. Four semester-hour credits. Professor BASSLER and Dr. RESSER.

21. *Engineering Geology*.—This course is intended primarily for civil engineers and others interested in applied geology. The work covers the general principles of geology with special emphasis upon those relating to engineering problems. The structure of rocks relative to building operations, the controlling factors of water supply and water purification and similar problems are discussed in detail. Text-book, *Engineering Geology* by Ries and Watson. *Mon., Fri.*, at 4.00. Four semester-hour credits. Dr. RESSER.

22. *Paleontology*.—A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology. Six semester-hour credits. Professor BASSLER.

Third Section. Primarily for Graduates.

50. *Advanced Geology, Mineralogy and Paleontology*.—Advanced course in these subjects may be arranged for competent students. Six semester-hour credits. Professor BASSLER.

GERMANIC LANGUAGES AND LITERATURE

First Section. Primarily for Undergraduates.

1. *Elementary*.—The essentials of German grammar; translation of easy prose and poetry; beginning conversation; composition and dictation. This course is open to beginners, and the work done is equivalent to that of a two year's course in high schools and academies of good standing. *Tu., Th., Sat.*, at 11.15. Six semester-hour credits. Professor SCHOENFELD.

2. Parallel with course 1. *Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor SCHMIDT.

3. Selected texts from the best contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued, with special emphasis on syntax, word-formation, and the relationship of German and English; conversation continued. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.*, at 11.15. Six semester-hour credits. Professor SCHOENFELD.

4. *Parallel with Course 3.*—Contemporary German is read during the first half-year and classical during the second half-year. *Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Professor SCHMIDT.

6. *Scientific and Technical German.*—Designed primarily for students in the scientific and engineering courses. This course may be taken by students who have passed course 1 or 2, or who have satisfied the admission requirement in elementary German. *Tu., Th., Sat.*, at 6.00. Six semester-hour credits. Professor SCHMIDT.

7. Advanced course in German syntax; principal difficulties of the language; idioms, synonyms; translations of English prose into German; essays; selected advanced prose; classical and historical reading and literature; advanced science. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.*, at 1.45. Six semester-hour credits. Professor SCHOENFELD.

8. Parallel with Course 7, with special reference to advanced students both in the historic-political and the scientific departments. *Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor SCHOENFELD.

Second Section. For Undergraduates and Graduates.

20. *Outline of the History of German Literature and Civilization from the Teutonic Origins to the Renaissance and Reformation*, with special reference to the emerging of the Germanic, Romance, and Slavic races. Anthology of the early literary monuments to the Minnesingers.—Lectures, extensive readings of the classics of the first period of bloom; advanced practice in writings, essays. *Mon., Wed., Fri.*, at 10.15. Six semester-hour credits. Professor SCHOENFELD.

21. *German Literature of the Second Classic Period at its Zenith.*—Lessing's *Life and Work*; Goethe's work in the Natural Sciences; Schiller's drama at its zenith; Goethe's and Winckelmann's influence on German art; with special reference to the modern drama; Goethe's *Faust*, as a special critical and philosophical study; classical ballad and lyric poetry; renaissance of the German folksied in the eighteenth and nineteenth centuries. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Professor SCHOENFELD.

22. *The Currents of German Literature from the Beginning of the Nineteenth Century until 1870.*—Romanticism, its social and political aspects; Modern

German Drama, with special emphasis on Kleist, Grillparzer, Hebbel; Lyrics and Ballads; Uhland and Heine. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Not given in 1920-21. Professor SCHOENFELD.

Third Section. Primarily for Graduates.

50. *Seminar in the History of Middle High German Literature*, with special reference to the Epic and Lyrical Poetry in the Twelfth and Thirteenth Centuries. Introduction to scientific methods of historical and literary research in the Nibelungenlied and the Gudrunsaga. Six semester-hour credits. Professor SCHOENFELD.

51. *Gothic*.—Introduction to comparative Indo-European Grammar. Six semester-hour credits. Professor SCHMIDT.

52. *Old High German*.—The development of the German language. Six semester-hour credits. Professor SCHMIDT.

Only one of the foregoing two courses (51, 52) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page 10.

GREEK

See Classical Language.

HISTORY

First Section. Primarily for Undergraduates.

1. *Mediaeval History*.—A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions, extending through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.*, at 2.45. Three semester-hour credits. Professor SWISHER.

2. *Mediaeval History*.—A history of the evolution of national government extending through the periods of the Renaissance and the Protestant Revolution; texts and assigned readings. Second half-year. Three semester-hour credits. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

3. *Modern European History*.—A study of the European States under the new conditions resulting from the discovery of America and the opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures and collateral readings. First half-year. *Mon., Wed., Fri.*, at 3.45. Three semester-hour credits. Professor SWISHER.

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; texts, lectures and collateral readings. Second half-year. *Mon., Wed., Fri.*, at 3.45. Three semester-hour credits. Professor SWISHER.

Second Section. For Undergraduates and Graduates.

20. *American History*.—A study of the formation of the Union and the subsequent history of the United States to date, with particular attention to those factors which have tended to develop or retard the growth of American nationality; text-book, lectures, and special reports. *Tu., Th., Sat.*, at 11.15. Six semester-hour credits. Assistant Professor ALDEN.

21. *Ancient History*.—A study of the history of the ancient oriental peoples, and of Greece and Rome; with collateral readings in the translated texts of Herodotus, Plutarch, Thucydides, Tacitus and others. *Tu., Th. Sat.*, at 9.15. Six semester-hour credits. Assistant Professor KAYSER.

25. *English History*.—A general course in English history with special attention to constitutional and political development. Texts, lectures and collateral reading. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Assistant Professor CHURCHILL.

30. *American Constitutional History*.—A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues. Lectures, text-books, and collateral readings. *Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Assistant Professor McARTHUR.

31. *Modern European History*.—A study of the French revolution and subsequent reaction extending through the Revolution of 1848. First half-year. *Tu., Th., Sat.*, at 6.00. Three semester-hour credits. Professor SWISHER.

32. *Modern European History*.—From 1850 to the present time. Second half-year. *Tu., Th., Sat.*, at 6.00. Three semester-hour credits. Professor SWISHER.

33. *Current History*.—A discussion of political questions of the day, with special reference to their origin and historical significance. Lectures throughout the year. *Sat.*, at 11.15. Two semester-hour credits. Professor SWISHER.

34. *Contemporary History*.—A study of international issues during the present century with special reference to the causes and results of the recent war. *Tu., Th., Sat.*, at 5.10. Professor SWISHER and Assistant Professor McARTHUR. Not given in 1920-21.

35. *General History*.—History of Europe from the fall of the Empire of the West to the election of Charles V. *Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor SWISHER and Assistant Professor McARTHUR.

Third Section. Primarily for Graduates.

54. *Seminary Work*.—The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the Seminaries of American and Modern European History.

Undergraduate students qualified by previous historical study, who desire to do intensive work with a view to gaining fuller information upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminars. Regular meeting of Seminar, *Saturday*, 12.15-2.15. Six semester-hour credits. Professor SWISHER, Assistant Professor ALDEN, and Assistant Professor CHURCHILL.

Note.—Additional courses in history may be given in 1920-21, and there may be resulting changes in class hours. Announcements of the changes will be made in September.

INTERNATIONAL LAW AND DIPLOMACY

See Political Science.

LATIN

See Classical Languages.

MATHEMATICS

First Section. Primarily for Undergraduates

3. *College Algebra; Solid Geometry; Plane Trigonometry.*—Algebra is studied during the first half-year, solid geometry during February and March, and trigonometry during April and May. Section A. *Mon. Wed., Fri.*, at 9.15. Section B. *Tu., Th., Sat.*, at 9.15. Six semester-hour credits. Professor ERWIN.

4. *Algebra; Plane Trigonometry.*—Algebra is studied until April 1, and trigonometry during April and May. *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Assistant Professor HODGKINS.

6. *College Algebra; Solid Geometry; Plane Trigonometry.*—Parallel with Course 3. *Mon., Wed., Fri.*, at 6.00. Six semester-hour credits. Assistant Professor HODGKINS.

8. *College Algebra.*—*Mon., Wed., Fri.*, at 5.10. Second half-year. Three semester-hour credits. Mr. DANIEL.

9. *Trigonometry; Analytic Geometry.*—Trigonometry until Jan. 1, analytic geometry for the remainder of the session. The completion of Course 3, 4 or 6 is requisite for admission to this course. *Mon., Wed., Fri.*, at 10.15. Six semester-hour credits. Professor ERWIN.

12. *Trigonometry; Analytic Geometry.*—Parallel with Course 9. Section A. *Mon., Wed., Fri.*, at 5.10. Section B. *Mon., Wed., Fri.*, at 6.00. Section C. *Tu., Th., Sat.*, at 6.00. Six semester-hour credits. Professor ERWIN.

Second Section. For Undergraduates and Graduates

20. *Differential and Integral Calculus; Elements of differential equations.*—*Tu., Th., Sat.*, at 5.10. Six semester-hour credits. Professor HODGKINS.

21. *Differential and Integral Calculus; Elements of differential equations.*—*Tu., Th., Sat.*, at 9.15. Six semester-hour credits. Professor HODGKINS.

24. *An Elementary Treatise on the Theory of Equations; The Number-System of Algebra.*—*Tu., Th., Sat.*, at 10.15. First half-year. Three semester-hour credits. Professor ERWIN.

25. *Introduction to Infinitesimal Analysis; Hyperbolic Functions.*—*Tu., Th., Sat.*, at 10.15. Second half-year. Three semester-hour credits. Professor ERWIN.

Third Section. Primarily for Graduates

50. *Differential Equations.*—*Mon., Fri.*, at 11.15. Four semester-hour credits. Professor HODGKINS.

51. *Least Squares.*—*Tu., Th.*, at 10.15. Second half-year. Two semester-hour credits. Professor HODGKINS.

54. *Theory of Functions of a Complex Variable*.—Tu., Th., Sat., at 5.10. Six semester-hour credits. Professor ERWIN.

55. *Differential Geometry*.—Tu., Th., Sat., at 5.10. Six semester-hour credits. Note.—Not more than two of the courses 24, 25, 54, and 55 will be given during any one semester. Professor ERWIN.

MECHANICAL DRAWING

First Section. Primarily for Undergraduates

1. *Mechanical Drawing*.—A general course embracing the care and use of instruments; Freehand lettering, orthographic and isometric projections; sketching of simple machine details; principle of working drawings; curve plotting. Section A. Mon., Wed., 1.45 to 4.45. Section B. Mon., Fri., 7.30 to 10.30 P. M. Four semester-hour credits. Assistant Professor HALSEY, Mr. WOODWARD, Mr. WILSON, Mr. CRUICKSHANKS.

2. *Machine Drawing*.—A course in working drawings especially designed for Mechanical and Electrical Engineering students. The course is largely one of empirical design of standard parts. Much stress is laid upon drafting room practice, arrangement of views and conventional forms and standards. Section A. Mon., Wed., 1.45 to 4.45. Section B. Tu., Th., 7.30 to 10.30 P. M. Four semester-hour credits. Assistant Professor HALSEY, Mr. WOODWARD, Mr. WILSON and Mr. CRUICKSHANKS.

4. *Mechanical Drawing*.—A course for Chemical Students. Section A. Wed., 1.45 to 4.45. Section B. Mon., 7.30 to 10.30 P. M. Two semester-hour credits. Assistant Professor HALSEY, Mr. WOODWARD, Mr. WILSON, Mr. CRUICKSHANKS.

8. *Descriptive Geometry*.—A course of lectures, recitations, and drafting room work on the line, point, and plane; single and double curved surfaces; tangent lines and tangent planes; intersections of lines, planes, and solids; shades, shadows and perspective. Section A. Fri., 1.45 to 4.45. Section B. Wed., 7.30 to 10.30 P. M. Two semester-hour credits. Professor LAPHAM and Mr. CRUICKSHANKS.

MECHANICAL ENGINEERING

First Section. Primarily for Undergraduates

1. *Mechanism*.—A course in the systematic study of the kinematics of machinery, in which the mechanical movements are reduced to a scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanism are constantly used.

Some attention is given to the design of gear teeth, and a large part of the second half-year is devoted to the study of steam engine valve gears. Section A. Mon., Wed., Fri., at 10.15. Section B. Mon., Wed., Fri., at 6.00 and one two-hour drawing period per week. Eight semester-hour credits. Mr. CRUICKSHANKS.

9. *Engineering Laboratory*.—A course of practical work in the testing of engineering apparatus and materials. The work consists of tests of the strength of iron steel and cement; measurement of the flow of air and water;

tests of steam calorimeters; tests of pumping machinery; efficiency tests of steam engines; fuel value determinations; evaporative efficiency of boilers. Two three-hour periods, second half-year. Two semester-hour credits. Assistant Professor HALSEY.

10. *Engineering Laboratory*.—A completion of Course 9. Two three-hour periods, first half-year. Two semester-hour credits. Assistant Professor HALSEY.

11. *Engineering Laboratory*.—Advanced work in the laboratory for Mechanical Engineering students. The work consists of efficiency tests of refrigerating machinery, air compressing machinery; Hirn's analysis; etc. Two three-hour periods, second half-year. Two semester-hour credits. Assistant Professor HALSEY.

Second Section. For Undergraduates and Graduates

20. *Thermodynamics, Steam Boilers, and Power Plant Accessories*.—About five months are devoted to the principles of thermodynamics, the theoretical gas and vapor cycles, and the properties of steam. The application of the theoretical vapor cycles to the real steam engine is discussed. The latter part of the course is devoted to the study of steam boilers, steam turbines, gas engines, steam power plant accessories, compression and refrigeration machinery. Three hours. Six semester-hour credits. Assistant Professor HALSEY and Mr. CRUICKSHANKS.

23. *Hydraulic Machinery*.—This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The impeller and diffusion vane case of a four stage centrifugal pump are designed and drawings made of these parts. Two hours, first half-year. Two semester-hour credits. Assistant Professor HALSEY.

24. *Methods of Manufacture*.—A study of modern manufacturing methods, machine tools, automatic machines and quantity production machinery. Two hours, second half-year. Two semester-hour credits. Assistant Professor HALSEY.

25. *Machine Design*.—This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are:

The complete design of a punch, or the design of a steam boiler, a series of shaft-couplings, and a fly-wheel.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five hours in the drawing room. Four semester-hour credits. Assistant Professor HALSEY.

26. *Dynamics of Machinery*.—A course including a number of the principal applications of dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of gas and steam

engines. Two hours. Four semester-hour credits. Assistant Professor HALSEY.

27. *Power Plants*.—A course of problems dealing with the operation, finance and economics of steam and gas-power plants. The course should be taken with the second semester of Mechanical Engineering, 20. Two three-hour problem periods. Two semester-hour credits. Assistant Professor HALSEY.

28. *Industrial Management*.—A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the method of superintendence and of compensating labor, the determination of the cost of production, and the effect on costs of different systems of distributing indirect expenses. This course also considers the factors which enter into a determination of the depreciation of structures and the economic selection thereof. Two hours. Four semester-hour credits. Assistant Professor HALSEY.

29. *Heating and Ventilating*.—This course deals with the elementary principles underlying the subject of heating and ventilating. Furnace heating, direct and indirect steam heating, hot-water heating, and the ventilating of different types of buildings are discussed. Two hours. Second half-year. Two semester-hour credits. Assistant Professor HALSEY.

30. *Gas Engines*.—This course deals with the thermodynamics and practice of the internal combustion engine. A study is made of the principal existing types of engines. Three hours. First half-year. Three semester-hour credits. Assistant Professor HALSEY.

31. *Steam Turbines*.—This course deals with the thermodynamics and practice of the steam turbine. Nozzle and blade design is taken up and a study is made of the existing types of turbines. Two hours. Second half-year. Two semester-hour credits. Assistant Professor HALSEY.

Third Section. Primarily for Graduates.

50. *Advanced Machine Design*.—Six semester-hour credits. Assistant Professor HALSEY.

51. *Advanced Power Plant Design*.—Six semester-hour credits. Assistant Professor HALSEY.

METEOROLOGY

Third Section. Primarily for Graduates.

50. *Applied Meteorology*.—Investigation of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. Six semester-hour credits. Professor MOORE.

51. *Meteorological Physics*.—This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those

wishing to make this their principal study will be assisted in the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Six semester-hour credits. Professor HUMPHREYS.

NAUTICAL SCIENCE

First Section. Primarily for Undergraduates.

1. *Nautical Science*.—Marine and aerial navigation; nautical astronomy; nautical almanac; production and use of nautical charts; tides; applications of meteorology, terrestrial magnetism and oceanography to navigation and seamanship; deviation of the compass in iron and steel ships; theory and use of instruments of navigation. Four semester-hour credits. Professor LITTLEHALES.

Third Section. Primarily for Graduates.

50. *Nautical Science*.—Special investigations requiring original thought in relation to avenues of progress, such as the neutralization of the effects of the ship's magnetism upon the compass, the development of the gyroscopic compass, the supplying of means to enable seamen to make astronomical observations at night or when the horizon is hidden from view. The applications of nautical astronomy to aerial navigation. Conferences, assigned readings, direction of research. Six semester-hour credits. Professor LITTLEHALES.

NAVAL ARCHITECTURE

Second Section. For Undergraduates and Graduates.

20. *Elementary Naval Architecture*.—Calculations and details of construction connected with the design of steel composite and wooden ships for the merchant, naval and special services. Students make structural, and line drawings for a given vessel. Three recitations, one drawing period. Eight semester-hour credits. Mr. JENNISON.

21. *Advanced Naval Architecture*.—Advanced design, ship construction, equipment and fittings, organization and administration of shipyards, economics of design, inspection, testing, contracts and specifications. Students' complete design, calculations and specifications for a vessel. At seasonable periods during the course, shipyards in the vicinity are visited and studied. Three recitations, one drawing period. Eight semester-hour credits. Mr. JENNISON.

24. *Elementary Marine Engineering*.—Boilers, reciprocating engines and auxiliary machinery. Fuels and thermodynamics for marine machinery, indicator diagrams and valve gears. Students make arrangement drawings for a scotch boiler and reciprocating engine. Three recitations, one drawing period. Eight semester-hour credits. Mr. JENNISON.

PHILOSOPHY AND PSYCHOLOGY

First Section. Primarily for Undergraduates.

1. *General Psychology*.—An introductory study of human nature in its emotional, intellectual, and volitional aspects. First half-year. Mon.,

Wed., Fri., at 10.15. Three semester-hour credits. Assistant Professor METCALF.

2. *General Psychology*.—Parallel with Course 1. Second half-year. *Mon., Wed., Fri.*, at 5.10. Three semester-hour credits. Assistant Professor METCALF.

6. *General Psychology*.—Parallel with course 1. First half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Assistant Professor METCALF.

3. *Logic*.—A study of the thinking process, the principles of deductive and inductive inference, and the nature, structure, and organization of knowledge. Second half-year. *Mon., Wed., Fri.*, at 10.15. Three semester-hour credits. Professor RUEDIGER.

4. *Logic*.—Parallel with Course 3. First half-year. *Mon., Wed., Fri.*, at 5.10. Three semester-hour credits. Professor RUEDIGER.

8. *Logic*.—Parallel with course 3. Second half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Assistant Professor METCALF.

Second Section. For Undergraduates and Graduates.

20. *History of Philosophy*.—The more important epochs in the history of thought. Attention is directed to the relation of these distinctive periods to the course of the world's progress. *Tu., Th., Sat.*, at 10.15. Six semester-hour credits. Professor RICHARDSON.

21. *Ethics*.—A historical and theoretical course, with the aim of acquainting the student with the principal ethical theories. Reference is made to the application of these theories to concrete conditions. Second half-year. *Tu., Th.*, at 9.15. Two semester-hour credits. Professor RICHARDSON.

22. *Ethics*.—Parallel with Course 21. Second half-year. *Mon., Wed.*, at 6.00. Two semester-hour credits. Professor RICHARDSON.

23. *Laboratory Psychology*.—Experiments on sensation, perception, attention, memory, feeling motor processes, etc. In the second half-year the course will include a study of mental tests. Prerequisite: general psychology. Lecture, *Mon.* at 1.45, Laboratory *Wed., Fri.* 1.45-3.45. Six semester-hour credits. Assistant Professor METCALF.

24. *History of Philosophy*.—The development of philosophy, its nature and problems. This course, while introductory, is designed to be comprehensive and to give the student a general survey of the philosophic field. *Tu., Th.*, at 5.10. Four semester-hour credits. Professor RICHARDSON.

25. *Laboratory Psychology*.—Experiments on sensation, movement, effects of practice, memory and association, emotional manifestations, etc., and practical work with the Binet and other mental tests. *Sat.* 9.15-11.15. Three semester-hour credits. Assistant Professor METCALF.

27. *Recent Philosophical Movements*.—A consideration of the various philosophical movements and tendencies of the immediate past. A critical study of the occasion and meaning of the trend of thought at the present time. Lectures and reading of recent books and periodicals. *Wed.*, at 5.10. Two semester-hour credits. Professor RICHARDSON.

28. *Philosophy of Nature*.—A critical examination of the concepts of physical science. An investigation of the significance of scientific laws and theories. Not given in 1920-21. Two semester-hour credits. Professor RICHARDSON.

(Courses 27 and 28 are given in alternate years.)

29. *Problems of Philosophy*.—A critical and constructive examination of fundamental philosophic principles and problems. Lectures, readings, and reports. First half-year. *Tu., Th.*, at 9.15. Two semester-hour credits. Professor RICHARDSON.

30. *Problems of Philosophy*.—Parallel with Course 29. First half-year. *Mon., Wed.*, at 6. Two semester-hour credits. Professor RICHARDSON.

Third Section. Primarily for Graduates.

50 *Seminar in Psychology*.—Topics of current interest in psychology will be studied by means of papers, discussions and reviews of contemporary literature. Open to qualified undergraduates. *Tu. and Th.* at 6. Six semester-hour credits. Assistant Professor METCALF.

51. *Metaphysics*.—The principles of metaphysics and the problems of philosophy. An advanced course tracing the origin and development of metaphysical questions, and a critical examination of the attempted solution of these problems. Readings, conferences and written reports. Six semester-hour credits. Professor RICHARDSON.

52. *Advanced, Experimental, Abnormal or Physiological Psychology*.—Course to be altered in different years in accordance with the needs of students. Prerequisite—courses in general psychology, and introductory experimental psychology. Conferences, reading of recent literature, and demonstrations. *Mon.*, 7.30-9.30. Six semester-hour credits. Professor FRANZ.

53. *Research in Psychology*.—Advanced students, who select psychology as major or minor for the degree of A.M., or Ph.D., will be given special topics for investigation in abnormal, physiological or experimental psychology. To be preceded or accompanied by Course 52 or its equivalent. Six semester-hour credits. Professor FRANZ.

PHYSICS

First Section. Primarily for Undergraduates.

1. *General Physics*.—A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experimental demonstrations. This is a required course for Sophomores in Engineering, and may be elected by the general student who has completed Mathematics 9 or 12. Section A, *Mon., Wed., Fri.*, at 11.15; Section B, *Mon., Wed., Fri.*, at 5.10. Six semester-hour credits. Professor BROWN.

2. *Laboratory Physics*.—Laboratory methods, accurate measurement of physical quantities, and experimental study of physical laws and apparatus. Course 2 is arranged to accompany Course 1, and may not otherwise be

taken without previous preparation in Physics equivalent to Course 1. Two two-hour periods. *Tu., Th.*, 10.15, 2.45, or 7.30, or *Mon., Fri.*, 7.30. Four semester-hour credits. Professor BROWN, Mr. CHENEY and assistants.

3. *Introductory General Physics*.—Recitations, and lectures illustrated by experimental demonstrations. Similar in scope to Course 1, but less mathematical in treatment. Planned with reference to the needs of the student who desires an acquaintance with the facts and principles of Physical Science in their relation to the other sciences. Section A, *Mon., Wed., Fri.*, at 1.45, Professor BROWN; Section B, *Mon., Wed., Fri.*, at 6.00, Mr. CHENEY. Six semester-hour credits.

4. *Introductory Laboratory Physics*.—Laboratory methods, and experimental study of physical laws and apparatus, and of the use of the simpler instruments of precision measurement. Course 4 is arranged to accompany Course 3, and may not otherwise be taken without previous preparation in Physics equivalent to Course 3. *Tu., Th.*, 10.15, or *Tu., Th.*, 2.45, or *Mon., Fri.*, 7.30. Four semester-hour credits. Professor BROWN, Mr. CHENEY and Assistants.

9. *Elementary Electricity and Magnetism and its Applications*.—Recitations and lectures illustrated by experimental demonstrations. This course is designed to acquaint the non-technical student with the fundamental principles and phenomena of Electricity and Magnetism, and their applications in every day life. *Tu., Th.*, 11.15. Four semester-hour credits. Professor BROWN.

Second Section. For Undergraduates and Graduates.

21. *Heat and Thermodynamics*.—A recitation and lecture course, using Edser's *Heat* as a class text, and the more advanced texts and the literature for reference reading. Six semester-hour credits. Not given in 1920-21. Professor BROWN.

22. *Light*.—A recitation and lecture course, using Edser's *Light* as a class text, and the more advanced texts and the literature for reference reading. Six semester-hour credits. Not given in 1920-21. Professor BROWN.

23. *Electricity and Magnetism*.—Lectures and recitations. The fundamental theory and phenomena of Electricity and Magnetism will be studied as a preparation for the study of the recent developments and theories in this field of Physical Science. Special attention will be given, towards the end of the course, to the electron theory in its relation to these modern developments. *Tu., Th., Sat.*, at 5.10. Professor BROWN.

25. *Advanced Laboratory Physics*.—This course is planned to follow Course 2, and is given for students especially interested in Physics. The experimental work may be of a general nature, or may follow special lines of study, according to the needs of the individual student. Course 25 may advantageously be taken by students in Courses 21, 22 and 23. One or more periods per week. Two or more semester-hour credits. Hours by arrangement. Assistant Professor BROWN.

Third Section. Primarily for Graduates.

57. *Statistical Mechanics and Kinetic Theory*.—This course includes Gibb's preliminary derivation of the fundamental equations of thermodynamics and a discussion of the physical properties of gases from the standpoint of general dynamics. Viscosity, diffusion, heat conduction, Brownian movements, Van der Wall's equations and molecular aggregation and dissociation. Gibb's statistical mechanics and Jean's Dynamical Theory of Gases. A lecture and seminar course. Not given in 1920-21. Mr. VAN ORSTRAND.

58. *Elasticity*.—The physical properties of solids as applied to problems in geophysics. Homogenous stress and strain. Potential energy of strained solids. Transmission of force. Propagation of earthquake waves. Love's Mathematical Theory of Elasticity. A lecture and seminar course. Not given in 1920-21. Mr. VAN ORSTRAND.

60. *Least Squares*.—Derivation of the law of errors and adjustment of observations with special reference to the determination of the constants of empirical formulas. Merrimans' Method of Least Squares. A lecture and recitation course. First half-year. Mon. at 5.10 One semester-hour credit. Mr. VAN ORSTRAND.

61. *Conduction of Heat*.—Fourier's analysis is applied to numerous problems in the diffusion of heat and substances. Ingersoll and Zobel's Mathematical Theory of Heat Conduction. A lecture and recitation course. Second half-year. Mon., at 5.10. One semester-hour credit. Mr. VAN ORSTRAND.

POLITICAL SCIENCE

First Section. Primarily for Undergraduates.

1. *Government of the United States*.—Besides an analysis of the structure of the federal government this course includes a study of the powers and the influence of the president, the power to make treaties, to tax, to control the railroads and the wires, and to restrict immigration. The course surveys the functions of the courts, and it shows how the Federal Trade Commission has modified the earlier policies in regard to the trusts. The problems connected with the currency, the tariff, foreign commerce, and with our colonial empire are discussed. Governmental changes in foreign countries are noted and compared with those at home. First half-year. Mon., Wed., Fri., at 10.15. Three semester-hour credits. Professor HILL.

2. *Government of the United States*.—Parallel with Course 1. Tu., Th., Sat., at 6.00. Professor HILL.

3. *State Government*.—The vote, public opinion, direct legislation, police power, public utilities, and executive responsibility are the chief topics. A rapid survey is made of the three types of city government in the United States and of local government in the United Kingdom and in France. Second half-year. Mon., Wed., Fri., at 10.15. Three semester-hour credits. Professor HILL.

4. *State Government*.—Parallel with Course 3. *Tu., Th., Sat.*, at 6.00. Professor HILL.

6. *Political Parties in the United States*.—A study of the functions of political parties in our government, their history, and their organization. First half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Not given in 1920-21.

8. *South American Republics*.—A sketch of their establishment, an analysis of the structure of their governments, and a study of how these governments reflect economic and social conditions is the object of the course. Second half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Not given in 1920-21.

Second Section. For Undergraduates and Graduates.

21. *Comparative European Governments*.—The governments of the British Empire and of Germany. First half-year. *Mon., Wed., Fri.*, at 11.15. Three semester-hour credits. Professor HILL.

22. *Comparative European Governments (continued)*.—The Governments of France, Italy and Switzerland are described and some attention is given colonial administration. Second half-year. *Mon., Wed., Fri.*, at 11.15. Three semester-hour credits. Professor HILL.

23. *City Government in the United States*.—A study of the origin and structure of the mayor and council, commission, and city manager plans, home rule, the relation of the city to the state, municipal powers and officers, social and individual rights and of references to European experience. First half-year. *Mon., Wed., Fri.*, at 11.15. Three semester-hour credits. Not given in 1920-21.

24. *Constitutional Law*.—The interpretation of clauses in the constitutions of the United States and of the separate states affecting officers, courts, powers of Congress, police power and private rights as found in judicial decisions forms the subject matter. Second half-year. *Mon., Wed., Fri.*, at 11.15. Three semester-hour credits. Not given in 1920-21.

26. *Brazil, Its Political Evolution*.—A study of the political, social, and economical evolution of Portuguese America. The international policy of Brazil is given due consideration. The course runs through the year. Two semester-hour credits. *Mon.*, at 5.10. Professor COUTINHO.

27. *International Relations*.—The leading European treaties, especially during the last century, form the foci of the course. The purpose is to find what principles of international law and diplomacy have been evolved and applied. First half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Professor HILL.

28. *International Relations, (continued)*.—Leading American treaties form the basis for this course. Second half-year. *Tu., Th., Sat.*, at 5.10. Three semester-hour credits. Professor HILL.

29. *Principles of International Law*.—Lectures, text, cases, and a paper. First half-year. *Mon., Wed., Fri.*, at 5.10. Three semester-hour credits. Rear-Admiral Stockton and Professor HILL.

30. *Elements of Diplomacy and Diplomatic Usage*.—Lectures, text, cases, and a paper. Second half-year. *Mon., Wed., Fri.*, at 5.10. Three semester-hour credits. Rear-Admiral STOCKTON and Professor HILL.

Third Section. Primarily for Graduates.

51. *Readings in Political Science*.—This course is arranged to meet the individual needs of advanced students. The handling of material and the writing of a report are included. Hours by appointment. Two semester-hour credits each half-year. Professor HILL.

PREVENTIVE MEDICINE

Third Section. Primarily for Graduates.

50. A seminar course dealing with vital statistics; etiology and prevention of infectious diseases; causes and prevention of infant mortality; prevention of disease of occupation; protective inoculations; municipal hygiene; national and interstate preventive measures. Six semester-hour credits. Professor PRYOR.

ROMANCE LANGUAGES AND LITERATURE

French

First Section. Primarily for Undergraduates.

1. *First-Year Course*.—Fraser and Squair's Grammar. Grammar, composition, drill in pronunciation, translation and reading of modern French fiction, comedy and history. For beginners. Six semester-hour credits. Section A, *Mon., Wed., Fri.*, at 9.15; Section B, *Tu., Th., Sat.*, at 9.15. Mr. PROTZMAN.

2. *First-Year Course*.—Parallel with Course 1. Fraser and Squair's French Grammar. For beginners. Six semester-hour credits. Section A, *Mon., Wed., Fri.*, at 5.10, Mr. PROTZMAN. Section B, *Mon., Wed., Fri.*, at 6.00, Mr. PROTZMAN. Section C, *Tu., Th., Sat.*, at 5.10, Mr. PROTZMAN. Section D, *Tu., Th., Sat.*, at 5.10., Mr. KRAMER. Section E, *Tu., Th., Sat.*, at 6.00, Mr. CULLOM.

3. *Second-Year Course*.—Fraser and Squair's French Grammar. First text, Loti, "Pêcheur d'Islande," (Holt); other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. Six semester-hour credits. Section A, *Mon., Wed., Fri.*, at 10.15, Professor HENNING. Section B, *Tu., Th., Sat.*, at 9.15. Professor DOYLE.

4. *Second-Year Course*.—Parallel with Course 3. Fraser and Squair's French Grammar. First text, Dumas fils, "La question d'argent" (Heath); other texts to be announced. Six semester-hour credits. Section A, *Tu., Th., Sat.*, at 5.10, Professor HENNING. Section B, *Tu., Th., Sat.*, at 6.00, Mr. KRAMER.

5. *General Survey of Modern French Literature*.—(Nineteenth, eighteenth, and seventeenth centuries.) Translation, collateral reading and reports thereon, lectures on literature. Open to students who have passed in

Course 3 or 4, or have fulfilled the admission requirements in Advanced French. Six semester-hour credits. *Mon., Wed., Fri.*, at 4.00. Professor HENNING.

6. *Parallel with French 5.*—Six semester-hour credits. *Tu., Th., Sat.*, at 6.00. Professor HENNING. (This course will be given only if elected by at least six students at the beginning of the year.)

7. *Conversation and Composition.*—Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French, or otherwise satisfy the instructor of their fitness to take it. Four semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Mr. TEILLARD. (This course will be given only if elected by at least twelve students at the beginning of the year.)

Second Section. For Undergraduates and Graduates.

(Courses in this group are open to students who have passed in Course 5 or 6, or otherwise satisfy the instructor of their fitness to take them.)

21. *Literature of the Seventeenth Century.*—History, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Boileau, Corneille, Descartes, Fénelon, Mme de La Fayette, La Bruyère, La Fontaine, La Rochefoucauld, Malherbe, Molière, Racine, Saint-Evremond, Saint-Simon, Mme de Sévigné, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Six semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Professor HENNING. Not given in 1920-21.

26. *Literature from 1750 to 1850; The Romantic Movement.*—History, criticism, travels, fiction, drama, lyric poetry. Rousseau, Bernardin de Saint-Pierre, Chénier, Balzac, Baudelaire, Chateaubriand, Gautier, Hugo, Lamartine, Michelet, Musset, Sainte-Beuve, George Sand, Mme de Staël, Thierry, Vigny, etc. Translation, collateral reading and reports thereon, lectures on literature and history. Six semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Professor HENNING. Not given in 1920-21.

28. *Literature from 1850 to the present.*—History, philosophy, criticism, fiction, drama, lyric poetry. Augier, Brunetière, Daudet, Dumas fils, Flaubert, France, Heredia, Hervieu, Leconte de Lisle, Lemaitre, Loti, Maeterlinck, Maupassant, Mérimée, Renan, Rostand, Sully Prudhomme, Taine, Verlaine, etc. Six semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Professor HENNING. (Given in 1920-21.)

Third Section. Primarily for Graduates.

50. *Old French.*—Philology and Literature. *La Chanson de Roland* and Chrétien de Troyes. Phonology and morphology of Old French, with an outline of its development through Vulgar Latin. Survey of French Literature to the end of the 13th century. Some knowledge of Latin is essential. Six semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Assistant Professor DOYLE. (Given in 1920-21.)

55. One course in the literature of the nineteenth century will be arranged for competent graduates. Six semester-hour credits. *Mon., Wed., Fri.*, at 5.10. Professor HENNING.

Spanish

First Section. Primarily for Undergraduates.

1. *First-Year Course*.—Hills and Ford's First Spanish Course. Grammar, written and oral composition, drill in pronunciation, translation of modern Spanish fiction, comedy and history. For beginners. Six semester-hour credits. Section A. *Mon., Wed., Fri.*, at 9.15. Mr. PATISON. Section B. *Mon., Wed., Fri.*, at 1.45. Mr. PROTZMAN.

2. *First-Year Course*.—Parallel with Course 1. Hills and Ford's First Spanish Course. For beginners. Six semester-hour credits. Section A. *Mon., Wed., Fri.*, at 5.10. Mr. PATISON. Section B. *Mon., Wed., Fri.*, at 6.00. Mr. PATISON. Section C. *Tu., Th., Sat.*, at 5.10. Mr. PATISON. Section D. *Tu., Th., Sat.*, at 6.00. Mr. PATISON.

3. *Second-Year Course*.—Review of grammar, composition, translation of modern Spanish prose and poetry, collateral reading. Open to students who have passed in Course 1 or 2, or have fulfilled the admission requirements in Elementary Spanish, or otherwise satisfy the instructor of their fitness to take the course. Six semester-hour credits. *Mon., Wed., Fri.*, at 10.15. Mr. PATISON.

4. *Second-Year Course*.—Parallel with Course 3. Six semester-hour credits. Section A. *Mon., Wed., Fri.*, at 6.00. Assistant Professor DOYLE. Section B. *Tu., Th., Sat.*, at 5.10. Assistant Professor DOYLE.

6. *General Survey of Modern Spanish Literature*.—Eighteenth and nineteenth centuries; contemporary writers. Translation of representative works of drama, fiction, poetry. Lectures on the history of Spanish Literature. Outside reading and reports. Composition. Open to students who have passed in Spanish 3 or 4 or have done equivalent work. *Tu., Th., Sat.*, at 6.00. Six semester-hour credits. Assistant Professor DOYLE.

7. *Conversation and Composition*.—Open to students who have passed in Spanish 1 or 2, or have fulfilled the admission requirements in Elementary Spanish, or otherwise satisfy the instructor of their fitness to take it. *Mon., Wed., Fri.*, at 6.00. Four semester-hour credits. Mr. SALDAÑA. (This course will be given only if elected by at least twelve students at the beginning of the year.)

8. *Spanish-American Prose*.—Study of some of the leading critics, essayists, and novelists: Rodó, Hostos, Blanco-Fombona, Blest Gana, etc. Lectures and collateral reading. Open to students who have had two years of college Spanish or who otherwise satisfy the instructor of their fitness. First half-year, *Mon., Fri.*, at 5.10. Two semester-hour credits. Mr. JONES. (Not given in 1920-21).

10. *Spanish-American Poetry*.—Intensive study of some of the leading poets: Olmedo, Bello, Heredia, Darío, Chocano, Valencia, Nerro, etc. Open to students who have had two years of college Spanish or who otherwise satisfy the instructor of their fitness. Second half-year. *Mon., Fri.*, at 5.10. Two semester-hour credits. Assistant Professor DOYLE. (Not given in 1920-21).

Second Section. For Undergraduates and Graduates

(Courses in this group are open to students who have passed in Course 6, or otherwise satisfy the instructor of their fitness to take them.)

22. *Spanish Literature of the Sixteenth and Seventeenth Centuries.*—The Golden Age. Cervantes, Calderón, Lope de Vega. The classic Spanish drama. Origins and rise of the novel. The ballad. Lyric poetry. References to the influence of Spanish literature upon French and English. Translation, reports on outside reading, lectures. A large amount of collateral reading will be required. *Mon., Wed., Fri., at 4.00.* Six semester-hour credits. Assistant Professor DOYLE.

Portuguese*Primarily for Undergraduates*

1. *First-Year Course.*—Portuguese as a Romance Language. Phonetics and drill in pronunciation, dictation, grammar, translation, composition and conversation. In the second semester the classes are mainly conducted in Portuguese. For beginners. *Mon., Wed., Fri., at 6.00.* Six semester-hour credits. Professor COUTINHO.

2. *First-Year Course.*—General survey of the history of the Literature (Portugal and Brazil). No knowledge of Portuguese is necessary. *Th., Sat., 5.10.* Four semester-hour credits. Professor COUTINHO.

4. *Second-Year Course.*—Advanced grammar, composition, reading and translation of modern prose and poetry (Portuguese and Brazilian authors of XVIII and XIX centuries). In the second semester Portuguese authors of XVI and XVII centuries. Classes will be conducted in Portuguese. *Mon., Wed., Fri., at 5.10.* Six semester-hour credits. Professor COUTINHO.

SEMITIC LANGUAGES AND LITERATURE*Second Section. For Graduates and Undergraduates*

20. *Elementary Hebrew.*—Hebrew vocabulary and grammar; reading, translations of simple passages and briefer exercises. This course is open to beginners. Two hours a week. Four semester-hour credits.

22. *Advanced Hebrew.*—An intensive study of Hebrew grammar and its relation to Semitics in general. Comparative Semitic philology will be pursued. Translations of longer passages of prose and poetry. Readings and selections from the Old Testament and postbiblical literature. Two hours a week. Four semester-hour credits. Professor SCHAPIRO.

Third Section. Primarily for Graduates

50. Study of the history and development of Hebrew and cognate literatures. Certain epochs of Jewish History. A review of Modern Hebrew literature with particular emphasis on productions of the Haskala period. Special topics in addition to be selected by candidates. Six semester-hour credits. Professor SCHAPIRO.

ZOOLOGY

First Section. Primarily for Undergraduates

1. *Systematic Zoology*.—Invertebrates. This includes lectures and laboratory work. The lectures cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters classificatory laws, and the general principles of evolution. Lecture, *Mon.*, at 5.10; laboratory, *Wed., Fri.*, 5.10–6.50. Additional laboratory sections at hours to be announced. Six semester-hour credits. Professor BARTSCH, Mr. SCHMITT and Miss MACMILLAN.

2. *Systematic Zoology*.—Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrates, and correlated with these is the study and dissection of typical specimens of each group. Lecture, *Mon.*, at 6.00; laboratory *Wed., Fri.*, 5.10–6.50. Additional laboratory sections at hours to be announced. Six semester-hour credits. Professor BARTSCH, Mr. SCHMITT, Mr. WETMORE and Miss MACMILLAN.

Second Section. For Undergraduates and Graduates

20. *Practical Zoology*.—A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoology. Open to all students. One hour. Two semester hour credits. Professor BARTSCH.

23. *Ornithology*.—A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Four semester-hour credits. Professor BARTSCH.

Laboratory courses in histology and physiology will be arranged for competent students.

Third Section. Primarily for Graduates

50. Courses may be arranged for competent graduates. Six semester-hour credits. Professor BARTSCH.

SUMMER SCHOOL

ARTS AND SCIENCES

1920

CALENDAR

June 17-30	Registration, 10-12 a. m.; 4-6 p. m.
June 21	<i>Monday</i> —Instruction begins in the three-credit courses coming at 7.45 a. m. and in all the afternoon classes.
June 28	<i>Monday</i> —Instruction begins in the two-credit courses coming in the forenoon.
July 5	<i>Monday</i> —Holiday.
July 10	<i>Saturday</i> —Classes meet at the usual hours.

THE SUMMER SCHOOL

HISTORY AND CHARACTER

The present series of Summer Schools of George Washington University was authorized by the Board of Trustees in the fall of 1915 and the first session was held in the summer of 1916. The enrollment of that session reached 166 students. The work given was all of college grade, was offered by the regular members of the faculty and other specialists of equal standing, and was done in a manner no less thorough than that of the regular session. The attendance was excellent and the spirit that pervaded both faculty and students was exceptionally wholesome and refreshing. These standards and spirit have been fully maintained in all succeeding sessions.

GROWTH

The growth of the Summer School has been steady and substantial and has amply justified its inauguration. The enrollment in the four sessions held so far has been as follows:

1916, 166	1918, 308
1917, 230	1919, 461

An inspection of these figures shows that the enrollment of the third session was nearly double that of the first, that of the fourth fully double that of the second, and that of the last nearly three times that of the first. The annual rates of increase have been respectively 35, 36, and 50 per cent. On August 1, the 1820 session had an enrollment of 780, an increase of nearly 70 per cent over 1919.

THE STUDENT BODY

The aspect of the student body that is worthy of special remark is not its size but its cosmopolitan character. Every session enrolls students from nearly every state in the Union and from many foreign countries. Many of these students, it is true, are employed in Washington, but that in no way detracts from the liberalizing influence of associating with them.

LOCATION AND OPPORTUNITIES

The asset of the Summer School, as well as of the University as a whole, that is particularly unique and unrivaled is its location in the city of Washington, the nation's capital. Here are found the headquarters of the executive, legislative, and judicial branches of the national government, all of which may be visited freely and without cost. Indeed, in order to promote research and the diffusion of knowledge the Congress of the United States has made the scientific resources of the Government accessible to students by means of a joint resolution approved April 12, 1892. This resolution makes special mention of:

1. The Library of Congress.
2. The National Museum.
3. The Patent Office.
4. The Bureau of Education.
5. The Bureau of Ethnology.
6. The Army Medical Museum.
7. The Department of Agriculture.
8. The Fish Commission.
9. The Botanic Gardens.
10. The Coast and Geodetic Survey.
11. The Geological Survey.
12. The Naval Observatory.

When to these resources of the Government are added the libraries, museums, art galleries, and historic landmarks found in the city and vicinity we have an opportunity for culture and an environment for a Summer School that approximates the ideal.

ADMISSION

No entrance examinations or certificates of work completed in secondary schools will be required for admission to the Summer School, but no student will be allowed to register for any except an elementary course until he has given evidence satisfactory to the instructor concerned or to the Director that he is qualified to pursue the course to advantage.

REGISTRATION

The Director's office, 2023 G Street N. W., will be open to receive registrations from 10-12 a. m. and 4-6 p. m., after June 17. *Registration for courses, changes in registration, and the dropping of courses must all be arranged through the Director's office.*

CREDIT

The units of credit in semester hours carried by the several courses are indicated both in the schedule of classes on pages 6-8 and in the descriptive outlines of the course on pages 8-14. A semester-hour of work covers a minimum of fifteen class or laboratory periods.

Work satisfactorily completed in the Summer School will be accredited toward a degree at George Washington University on the same basis as work completed during the regular session.

CERTIFICATES

Certificates of attendance and of work satisfactorily completed will be issued on or about September 1.

FEES

Tuition fee per semester-hour.....	\$6.00*
Laboratory fees:	
Chemistry S 2, S 3, and S 7, each.....	\$10.00
Chemistry S 20, \$15; S 21.....	20.00
Home Economics.....	2.00
Physics.....	5.00
Breakage deposit in chemistry, the amount paid in excess of breakage to be returned, S 2, S 3, and S 7 each.....	10.00
Courses S 20, \$15; S 21.....	20.00

PAYMENT OF FEES

All fees are payable at the Treasurer's Office, 2101 G Street by July 3. Students who find it impossible to pay their fees by that date should make special arrangements with the Director when they register. No certificate of attendance or of credit will be issued unless all fees have been paid.

Students who are compelled to withdraw before the end of the session should promptly notify the Director, who will make a fair adjustment of the fees. No separate registration fee is charged, but one dollar of the tuition fee may not be canceled. As the fiscal year of the University ends August 31, no requests for refunds can receive consideration after that date.

LIBRARY

The University Library, which is found in the first floor of the main building, will be open during the session of the Summer School.

FACULTY

WILLIAM MILLER COLLIER, A.M., LL.D..... *President of the University*
WILLIAM CARL RUEDIGER, Ph.D..... *Director of the Summer School*

LEVI RUSSELL ALDEN, A.M..... *Assistant Professor of History*
EDITH ALLEN, A.M..... *Home Economics*

*Except for those George Washington University students who paid \$5.00 per semester-hour during 1919-20.

GERTRUDE RICHARDSON BRIGHAM, Ph.D.,

Instructor in Archaeology and History of Art

THOMAS BENJAMIN BROWN, Ph.D. *Assistant Professor of Physics*

WALTER LYNN CHENEY. *Instructor in Physics*

DE WITT CLINTON CROISSANT, Ph.D. *Professor of English*

EDWARD CULLOM, A.M. *Instructor in French*

WALTER S. DEFFENBAUGH, A.M. *Specialist in U. S. Bureau of Education*

JOHN THOMAS ERWIN. *Professor of Mathematics*

CHARLES EDWARD HILL, Ph.D. *Professor of Political Science*

HARRY GRANT HODGKINS, A.B. *Assistant Professor of Mathematics*

HOWARD LINCOLN HODGKINS, Ph.D.

Dean of the Department of Arts and Sciences and Professor of Mathematics

CECIL KNIGHT JONES, B.Lit. *Instructor in Spanish*

ELMER LOUIS KAYSER, A.M. *Assistant Professor of History*

ROBERT RUSS KERN, A.B. *Professor of Economics*

CLARENCE CAMERON KOCHENDERFER, A.M. *Professor of Commerce*

B. H. LAMORE. *Instructor in French and Spanish*

JEANNE MARET, A. B. *French*

CHARLES ELMER RESSER, Ph.D. *Instructor in Geology*

ANNIE T. RENSHAW. *Instructor in Public Speaking*

ALVIS L. RHOTON, A.M. *Associate Professor of Education, Pa. State College*

EDWARD ELLIOT RICHARDSON, M.D., Ph.D. *Professor of Philosophy*

WILLIAM CARL RUEDIGER, Ph.D.

Dean of Teachers College and Professor of Educational Psychology

ALFRED F. W. SCHMIDT, A.M. *Professor of German*

OTIS DOW SWETT, S.B., LL.M. *Professor of Chemistry*

WILLIAM ALLEN WILBUR, A.M., Litt.D.,

Dean of Columbian College and Professor of English

SCHEDULE OF CLASSES

The two-semester-hour classes coming in the forenoon begin on June 28, and all the others on June 21. The two-semester-hour classes will meet five times a week for six weeks and the three-semester-hour classes five times a week for nine weeks. No classes will be held on Monday, July 5, but classes will meet on Saturday, July 10.

Courses which open with less than eight students may be withdrawn.

	A. M.	Semester-hour	
	7.45-8.40	Credits	
S45	History of Commerce	3	Professor Kochenderfer
S22b	History of Education	2	Professor Rhoton
SII	Composition	2	Dr. Brigham
S26	American Poetry	2	Professor Wilbur
SXXXIII	Philosophy	2	Professor Richardson
	9-10		
SXXI	History of Art	2	Dr. Brigham
S21b	Education	2	Professor Ruediger
SXXX	Shakespeare	2	Professor Wilbur

S6b	Solid Geometry	2	Professor Erwin
S1	Psychology	2	Professor Richardson
S28	American Treaties	2	Professor Hill
10-11			
S22	Sociology	2	Professor Kern
S25	High School Methods	2	Professor Rhoton
S1	Food and Nutrition	2	Miss Allen
S3	Logic	2	Professor Richardson
S1a	U. S. Government	2	Professor Hill
11-12			
S23	Social Problems	2	Professor Kern
SXXXI	Educational Measurements	2	Professor Rhoton
SXXIV	European History	2	Professor Kayser
SXI	Household Management	2	Miss Allen
SXI	Governmental Problems	2	Professor Hill
P. M.			
5.10-6			
S1	Chemistry	6	Professor Swett
S42	World Politics	3	Professor Kochenderfer
S2a	Economics	3	Professor Kern
S26	Elementary Education	2	Mr. Deffenbaugh
S27	Modern Drama	3	Professor Croissant
S3	Geography	2	Dr. Resser
SIVa	German	3	Professor Schmidt
S20b	American History	3	Professor Alden
SVIII	Textiles and Sewing	2	Miss Allen
S4b	Trigonometry	2	Professor H. G. Hodgkins
S9b	Analytic Geometry	3	Professor Erwin
S3b	Physics	3	Professor Brown
S29	International Law	3	Professor Hill
S2b	French (2nd semester)	3	Mr. Lamore
S7	Conversational French	2	Miss Maret
S2a	First-year Spanish	3	Mr. Jones
5.10-6.50			
S2	Rhetoric	4	Professor Wilbur
6-6.50			
S20	Business	3	Professor Kochenderfer
S33	Commercial Law	2	Professor Alden
S2b	Economics	3	Professor Kern
S31	Journalism	3	Professor Croissant
SXXIII	The Renaissance	3	Professor Kayser
S1a	Library Science	3	Professor Schmidt
S4a	College Algebra	3	Professor H. G. Hodgkins
S9a	Trigonometry	3	Professor Erwin
S3a	Physics	3	Professor Brown
S24	Government	3	Professor Hill
S2a	First-year French	3	Mr. Cullom

S2b	Spanish (2nd semester) 6-7.40	3 Mr. Jones
S2	Geology 6-10	4 Dr. Resser
S2	Chemistry	4 Professor Swett
S3	Chemistry	4 Professor Swett
S7	Chemistry 6.50-7.40	4 Professor Swett
S33	American Literature	3 Professor Croissant
SXIIa	Library Science	3 Professor Schmidt
S4a	Second-year French	3 Mr. Lamore
S4a	Second-year Spanish	3 Mr. Lamore

COURSES OF INSTRUCTION

The letter S, meaning Summer, is prefixed to the numbers of courses to distinguish them from the courses offered during the regular session of the University. Courses corresponding approximately to those offered during the regular session are given corresponding numbers. Courses not so corresponding are assigned Roman numerals. The letters a and b following some of the numbers signify correspondence respectively to first and to second semester work of the regular session.

ART

S XXI. *History of Art*. An introductory course in the schools of painting and sculpture, from prehistoric to modern times, including especially Egyptian, Greek, Renaissance, intermediate, English, French, and American art.

Illustrated lectures. Visits to the National Gallery, the Library of Congress, and other collections. Special study may be arranged for advanced students. At 9. Two semester-hour credits. Dr. Brigham.

CHEMISTRY

S 1. *General Chemistry*.—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. 5.10. Six semester-hour credits. Professor SWETT.

S 2. *Laboratory Practice*.—A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiments. 6-10. Four semester-hour credits. Professor SWETT.

(NOTE: Courses S 1 and S 2 should be taken together. Courses S 20, *Qualitative Analysis*, six semester-hour credits, S 21, *Quantitative Analysis*, eight semester-hour credits, and S 23, *Organic Chemistry*, four semester-hour credits, will be given if demanded.)

S 3. *Synthetic Inorganic Chemistry*.—Syntheses of inorganic compounds. 6-10. Four semester-hour credits. Professor SWETT.

S 7. *Qualitative Analysis*.—A brief course intended primarily for students in engineering. 6-10. Four semester-hour credits. Professor SWETT.

COMMERCE

S 20. *Principles of Business*.—An introductory course in Business Economics. The following topics indicate the scope of the course, viz: Financing and management of business enterprises; purchasing; advertising; selling; ocean traffic and freight trade; credit; forecasting business conditions; banking; exchange; financial statements. At 6. Three semester-hour credits. Professor KOCHENDERFER.

S 33a. *Commercial Law*.—A study of the principles of the law relating to commercial transactions, especially contracts, sales, bailments, agency, partnership, negotiable instruments, and common carriers. At 6. Two semester-hour credits. Assistant Professor ALDEN.

S 42. *European Industrial Evolution and World Politics*.—A somewhat detailed study of the awakening of Japan, the problem of China, the interplay of rival imperial ambitions in the Far East, the causes of the World War, the Versailles Peace Conference and the international settlement made thereby. The introductory portion of the course will cover as intensively as time will permit agrarian problems, colonial expansion and commercial policies, the development of industry, and transportation. At 5.10. Three semester-hour credits. Professor KOCHENDERFER.

S 45. *History of Commerce*.—The rise and progress of commerce from antiquity to modern times, with particular emphasis on the effects of commerce on civilization and the relations between commercial and political development. At 7.45 a. m. Three semester-hour credits. Professor KOCHENDERFER.

ECONOMICS AND SOCIOLOGY

S 2a. *General Economics*.—This course deals with the problems of the distribution of wealth and such questions as value, prices, wages, rent, and interest. At 5.10. Three semester-hour credits. Professor KERN.

S 2b. *General Economics*.—This course deals with the organization of the industrial system and embraces an analysis of marketing, efficient methods of production, and money and banking. A discussion of such modern programs as the trust movement, government ownership, and the like is included. At 6. Three semester-hour credits. Professor KERN.

(Courses S 2a and S 2b may be taken concurrently.)

S 22. *General Sociology*.—An outline course in the principles of sociology devoted mainly to the study of the organization of society, the social systems, their functions, efficiencies, and programs for their development. At 10. Two semester-hour credits. Professor KERN.

S 23. *Modern Social Problems*.—A further analysis of modern social conditions with special studies of current questions in sociology. At 11. Two semester-hour credits. Professor KERN.

(Courses S 22 and S 23 may be taken concurrently.)

EDUCATION

S 21b. *Principles of Education*.—A study of education from the sociological standpoint; The biological and psychological bases, the problem of aim, social and personal objectives, the curriculum and course of study. At 9. Two-semester hour credits. Professor RUEDIGER.

S 22b. *History of Education*.—A survey of the evolution of educational theory and practice in modern times. The course is professional and cultural and aims to give teachers and social workers an intelligent historical background for their work. At 7.45 a. m. Two semester-hour credits. Professor RHOTON.

S 25b. *High School Methods*.—A study of the principles involved in high school instruction, with special references to the junior high school. At 10. Two semester-hour credits. Professor RHOTON.

S 26. *Elementary School Problems*.—A practical course for elementary school teachers and supervisors. Among the problems considered are: school discipline, classroom organization, methods of teaching. Text, collateral reading, and discussion. Much use is made of the chapters on Instruction in school survey reports. At 5.10. Two semester-hour credits. Mr. DEFFENBAUGH.

S XXXI. *Educational Measurements*.—A study of the various objective tests and scales used in measuring school products with practice in their use. Their relation to teacher improvement and administrative problems is noted. At 11. Two-semester hour credits. Professor RHOTON.

ENGLISH

S 2. *English Rhetoric*.—A course covering the entire text of English Rhetoric. 5.10-6.50. Four semester-hour credits. Professor WILBUR.

S II. *English Composition*.—Practice in self-expression; correction of common errors; facility in writing; methods of research; the short story. Theme work, class discussion, and lectures. Special help for personal needs. At 7.45 a. m. Two semester-hour credits. Dr. BRIGHAM.

NOTE: The completion of courses S 2 and S II together will be accepted in full satisfaction of the curriculum requirement in Freshman English.

S XI. *Public Speaking*.—At 12. Two semester-hour credits. Mrs. RENSHAW.

S 26. *American Poetry*.—Studies of American ideals as revealed in poetry. At 7.45 a. m. Two semester-hour credits. Professor WILBUR.

S 27. *The Modern Drama*.—A study of recent American, English, and European plays. At 5.10. Three semester-hour credits. Professor CROISSANT.

S XXX. *Shakespeare*.—The philosophies. Troilus and Cressida, Measure for Measure, Pericles, Cymbeline, The Tempest, A Winter's Tale. At 9. Two semester-hour credits. Professor WILBUR.

S 31. *Journalism*.—A study of the American newspaper. Lectures, and reports on daily newspapers. At 6. Three semester-hour credits. Professor CROISSANT.

S 33. *American Literature*.—Lectures and collateral reading. At 6.50. Three semester-hour credits. Professor CROISSANT.

FRENCH

See Romance Languages

GEOLOGY

S 2. *Geology*.—Systematic geology; dynamical, structural, and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-book: Cleland's *Geology*. 6.00-7.40. Four semester-hour credits. Dr. RESSER.

S 3. *Principles of Geography*.—The course considers the phenomena of the earth as a whole, the interrelations of these phenomena and their influence upon human affairs. It includes a study of the general geographical principles, including those of physiography and climate, and their application. At 5.10. Two semester-hour credits. Dr. RESSER.

GERMAN

S IVa. *Conversation and Rapid Reading*.—This course is open to students who have had one year of college German or its equivalent. Three semester-hour credits. At 5.10. Professor SCHMIDT.

S IVb. *A continuation course extending beyond the regular session of the Summer School*.—Three semester-hour credits. Professor SCHMIDT.

HISTORY

S 20b. *American History*.—History of the United States from the election of Andrew Jackson. At 5. Three semester-hour credits. Assistant Professor ALDEN.

SXXIII. *The Renaissance*.—A study of the beginnings of the Modern Period with emphasis on evolution of political, social, economic, religious, intellectual, and artistic ideas and institutions during the period. At 6. Three semester-hour credits. Assistant Professor KAYSER.

SXXIV. *The European Background of American History*.—This course is designed especially for teachers and embraces a study of those factors in Old World History that brought about and shaped the development of the colonies and later affected them as a nation. At 11. Two semester-hour credits. Assistant Professor KAYSER.

HOME ECONOMICS

SI. *Food and Nutrition*.—A study of the composition of food, the principles of cookery, nutritive values of foods and menu planning. Text, lectures, and laboratory work. At 10. Two semester-hour credits. Miss ALLEN.

S VIII. *Textiles and Sewing*.—The study of fibers and fabrics, sewing and elementary design. Lectures, discussion, and laboratory practice. At 5.10. Two semester-hour credits. Miss ALLEN.

S XI. *Household Management*.—A study of division of income, factors affecting cost of living, the equipment and organization of the household. Text, lectures, and recitations. At 11. Two semester-hour credits. Miss ALLEN.

LIBRARY SCIENCE

S Ia. *Principles of Library Science*.—This course is designed to cover the general principles of library science with special emphasis on the elements of cataloguing. Three semester-hour credits. At 6. Professor SCHMIDT.

S Ib. A continuation course extending beyond the regular session of the Summer School will be offered in cataloguing, the elementary principles of classification, and shelf listing. Three semester-hour credits. Professor SCHMIDT.

S XIIa. *Advanced Cataloguing and Classification*.—This course is open to students who have had courses S Ia and S Ib, or their equivalent in practical library work. Three semester-hour credits. At 6.50. Professor SCHMIDT.

S XIIb. A continuation course extending beyond the regular session of the Summer School will be offered in special problems in library administration and science. Three semester-hour credits. Professor SCHMIDT.

MATHEMATICS

S 4a. *College Algebra*.—Bowser's College Algebra. Ratio and proportion. Chapter XVI to the end of the book. At 6. Three semester-hour credits. Assistant Professor HODGKINS.

S 4b. *Plane Trigonometry*.—Crocket's Trigonometry. All of plane trigonometry. At 5.10. Two semester-hour credits. Assistant Professor HODGKINS.

NOTE. These courses will be duplicated respectively at 9 and at 10 by Professor HODGKINS if the demand justifies.

S 6b. *Solid Geometry*.—This course corresponds to courses 3 and 6 of the regular school year. Two semester-hour credits. At 9. Professor ERWIN.

S 9a. *Plane and Spherical Trigonometry*.—This course is offered primarily for students who have had Plane Trigonometry. Three semester-hour credits. At 6. Professor Erwin.

S 9b. *Analytic Geometry*.—This course is offered to students who have had Plane and Spherical Trigonometry. Three semester-hour credits. At 5.10. Professor ERWIN.

PHILOSOPHY AND PSYCHOLOGY

S 1. *General Psychology*.—An introductory study of the principal facts and laws of the mental life. At 9. Two semester-hour credits. Professor RICHARDSON.

S 3. *Logic*.—The principles of deductive and inductive inference. At 10. Two semester-hour credits. Professor RICHARDSON.

S XXIII. *Introduction to Philosophy*.—A course designed for beginners in philosophy, dealing with the nature of philosophy, the principles underlying it, and the principal theories that have arisen in the development of philosophic thought. This course is intended to give a general survey of the subject and to lead to more advanced work. At 7.45 a. m. Two semester-hour credits. Professor RICHARDSON.

PHYSICS

(NOTE: Physics S 3a and S 3b will be arranged so that, by special permission, they may both be taken during the same term. Either S 2a or S 2b may be taken in one summer term, but not both.)

S 2a and S 2b. *Laboratory Physics*.—The schedules of experiments are arranged to parallel courses S 3a and S 3b respectively, but different schedules may be arranged in special cases. Two semester-hour credits for either course. Hours by arrangement. Assistant Professor Brown, and Mr. Cheney.

S 3a. *Introductory General Physics*.—Mechanics, Heat, and Electrostatics. At 11. Three semester-hour credits. Assistant Professor BROWN.

S 3b. *Introductory General Physics*.—Magnetism and Electricity, Sound, and Light. At 5.10. Three semester-hour credits. Assistant Professor BROWN.

POLITICAL SCIENCE

S 1a. *Government of the United States*.—An introductory course. At 10. Two semester-hour credits. Professor HILL.

S XI. *Current Governmental Problems*.—At 11. Two semester-hour credits. Professor HILL.

S 24. *American Government*.—Advanced course. At 6. Three semester-hour credits. Professor HILL.

S 28. *Leading American Treaties*.—At 9. Two semester-hour credits. Professor HILL.

S 29. *International Law*.—At 5. Three semester-hour credits. Professor HILL.

ROMANCE LANGUAGES

French

S 2a. *First-Year Course*.—Essentials of French grammar, drill in pronunciation; oral and written composition; translation of modern French prose. For beginners. Fraser and Squair's French Grammar (Heath). At 6. Three semester-hour credits. Mr. CULLOM.

S 2b. *First-Year Course*.—(Second Semester.)—Open to students who have had one year of high school French or one semester of college French. At 5.10. Three semester-hour credits. Mr. LAMORE.

S 4a. *Second-Year Course*.—Review of French Grammar Fraser and Squair's French Grammar (Heath); oral and written composition; translation of modern French prose. First text, Sarcey's *Le Siege de Paris* (Heath); others to be announced. Open to students who have received credit for one year of college French, or its equivalent. At 6.50. Three semester-hour credits. Mr. CULLOM.

S 7. *Conversation and Composition*.—Open to students who have had one year of college French or its equivalent. At 5.10. Two semester-hour credits. Miss MARET.

Spanish.

S 2a. *First-Year Course*.—Elements of Spanish Grammar; drill in pronunciation; oral and written composition; translation of modern Spanish prose. Texts: Hills and Ford's *First Spanish Course* (Heath); De Vitis' *Spanish Reader* (Allyn & Bacon). At 5.10. Three semester-hour credits. Mr. JONES.

S 2b. *First-Year Course*.—(Second Semester.)—Open to students who have had one year of high school Spanish or one semester of college Spanish. At 6. Three semester-hour credits. Mr. JONES.

S 4a. *Second-Year Course*.—Review of grammar, composition, translation of modern Spanish prose and poetry, collateral reading. At 6.50. Three semester-hour credits. Mr. LAMORE.

THE MEDICAL SCHOOL, UNIVERSITY HOSPITAL AND DISPENSARY, AND THE TRAINING SCHOOL FOR NURSES AND THE DENTAL SCHOOL

MEDICAL SCHOOL

FACULTY

WILLIAM MILLER COLLIER, A. M., LL. D.,.....*President of the University*
WILLIAM CLINE BORDEN, M. D.,

Dean, Department of Medicine and Professor of Surgery

D KERFOOT SHUTE, A.M., M.D.,

Clinical Professor of Ophthalmology, Emeritus

HENRY CRÉCY YARROW, M. D.,.....*Professor of Dermatology, Emeritus*

WILLIAM K. BUTLER, A. M., M. D., *Professor of Ophthalmology, Emeritus*

GEORGE NICHOLAS ACKER, A. M., M. D.,

Professor of Pediatrics

STERLING RUFFIN, M. D.....*Professor of Medicine*

CHARLES WILLIAM RICHARDSON, M. D.,

Professor of Laryngology, Rhinology and Otology

JOHN WESLEY BOVÉE, M. D.

Professor of Gynecology

THOMAS ASH CLAYTOR, M. D.....*Clinical Professor of Medicine*

AURELIUS RIVES SHANDS, M. D.,

Clinical Professor of Orthopedic Surgery

RANDOLPH BRYAN CARMICHAEL, M. D.....*Professor of Dermatology*

FRANCIS RANDALL HAGNER, M. D....*Professor of Genito-urinary Surgery*

ALBERT LIVINGSTON STAVELY, M. D.....*Clinical Professor of Gynecology*

WILLIAM ALANSON WHITE, M. D.,

Professor of Psychiatry and Clinical Professor of Neurology

SHEPHERD IVORY FRANZ, Ph. D., LL. D., M. D.,...*Professor of Physiology*

OSCAR BENWOOD HUNTER, A. M., M. D.,

Professor of Bacteriology and Pathology and Assistant Dean.

BUCKNER MAGILL RANDOLPH, M. D.,

Professor of Materia Medica and Therapeutics

LUTHER HALSEY REICHELDERFER, M. D.,...*Clinical Professor of Surgery*

WM. H. MONCRIEF, M. D.,...*Professor of Military Surgery and Sanitation*

GIDEON BROWN MILLER, S. B., M. D.,...*Clinical Professor of Gynecology*

WILLIAM SINCLAIR BOWEN, M. D.....*Clinical Professor of Obstetrics*

OSCAR ADDISON MACK McKIMMIE, M. D.,

Clinical Professor of Laryngology and Otology

EDWARD RHODES STITT, A. B., M. D....*Professor of Tropical Medicine*

FRANK LEECH, M. D.....*Clinical Professor of Medicine*

HURON WILLIS LAWSON, S. M., M. D.....*Professor of Obstetrics*

FRANK ADELBERT HORNADAY, S. B., M. D.,.....*Professor of Dietetics*

THOMAS CHARLES MARTIN, M. D.....*Professor of Proctology*

HARRY HYLAND KERR, M. D. *Clinical Professor of Surgery*
 WILLIAM PINKNEY REEVES, M. D. *Clinical Professor of Surgery*
 EDGAR SNOWDEN, M.D.,

Professor of Hygiene and Clinical Associate in Obstetrics

HARRY S. BERTON, M. D., *Professor of Medical Jurisprudence*
 WILLIAM TORNWALL DAVIS, M. D., *Professor of Ophthalmology*
 JOHN K. BUTKIEWICZ, D. D. S. *Professor of Histology*
 CURTIS LEE HALL, M. D. *Professor of Orthopedics*
 NOLAN D. C. LEWIS, M. D., *Professor of Experimental Pathology*
 ARTHUR C. CHRISTIE, M. D. *Professor of Roentgenology*
 JAMES F. MITCHELL, M. D. *Clinical Professor of Surgery*
 GEORGE B. JENKINS, M. D. *Professor of Anatomy*
 RALPH E. MYERS, A. B., M. A., M. D.,

Professor of Chemistry and Pharmacology

CHARLES STANLEY WHITE, M. D., *Associate Professor of Surgery*
 DANIEL LERAY BORDEN, A. M., M. D., *Associate Professor of Surgery*
 GLENMORE FORD CLARK, M. D., *Associate Professor of Tropical Medicine*
 HARRY HAMPTON DONNALLY, A. M., M. D., *Clinical Professor of Pediatrics*
 TOMÁS CAJIGAS, M.D., *Associate Professor of Bacteriology and Pathology*
 JOSEPH HYRAM ROE, A. B., A. M., *Associate Professor of Chemistry*
 THOMAS A. GROOVER, M. D., *Associate Professor of Roentgenology*
 JOSEPH A. STOUT, A. B., M. A., Ph. D., M. D.,

Associate Professor of Physiology

EDGAR PASQUAL COPELAND, M. D., *Associate in Pediatrics*
 J. LEWIS RIGGLES, M. D., *Associate in Gynecology*
 WILLIAM CABELL MOORE, M. D., *Associate in Medicine*
 CHARLES AUGUSTUS SIMPSON, M. D., *Clinical Associate in Dermatology*
 COURSEN BAXTER CONKLIN, S. B., M. D., *Associate in Medicine*
 ARTHUR ELWOOD PAGAN, M. D., *Associate in Gynecology and Obstetrics*
 ROSS MCCLURE CHAPMAN, M. D.,

Clinical Associate in Psychiatry and Neurology

EVERETT MONROE ELLISON, A. M., M. D., *Clinical Associate in Medicine*
 THOMAS LINVILLE, M. D., *Clinical Associate in Medicine*
 EDWIN A. MERRITT, M. D., *Associate in Roentgenology*
 ADAM KEMBLE, M. D., *Associate in Genito-urinary Surgery*
 EDWARD GRANT SEIBERT, M. D.,

Clinical Instructor in Laryngology and Ophthalmology

JOHN POTTS FILLERBROWN, M. D., *Clinical Instructor in Surgery*
 VIRGIL B. JACKSON, M. D., *Clinical Instructor in Gynecology*
 HOMER GIFFORD FULLER, M. D.,

Clinical Instructor in Genito-urinary Surgery

CLINE N. CHIPMAN, M. D., *Instructor in Anaesthesia*

ALBERT PERKINS TIBBETS, A. B., M. D.,	<i>Clinical Instructor in Laryngology</i>
HARRY SAMUEL LEWIS, M. D.	<i>Instructor in Surgery</i>
ROBERT SAMUEL TRIMBLE, M. D.	<i>Clinical Instructor in Medicine</i>
WILLIAM BROWNE CARR, M. D.	<i>Instructor in Morbid Anatomy</i>
WILLIAM BERRY MARBURY, M. D.	<i>Instructor in Surgery</i>
SAMUEL HARRISON GREENE, M. D.,	<i>Clinical Instructor in Laryngology and Otology</i>
WILLIAM HOUSTON LITTLEPAGE, M. D.	<i>Clinical Instructor in Medicine</i>
WILLIAM DAVID TEWKESBURY, M. D.	<i>Clinical Instructor In Medicine</i>
THOMAS MADDEN FOLEY, M. D.	<i>Instructor in Orthopedic Surgery</i>
HOWARD FRANCIS KANE, A.B., M. D.	<i>Instructor in Obstetrics</i>
CARROLL EDWARD BINGHAM, M. D.	<i>Clinical Instructor in Medicine</i>
SAMUEL BOYCE POLE, M. D.	<i>Instructor in Laryngology and Otology</i>
NELSON DU'VAL BRECHT, M. D.	<i>Instructor in Gynecology</i>
RALPH COHEN, M. D.	<i>Instructor in Anatomy</i>
WILLIAM BINFORD KING.	<i>Instructor in Anatomy</i>
MARY O'MALLEY, M. D.,	<i>Clinical Instructor in Psychiatry and Neurology</i>
CHARLES O. KNOTT, M. D.	<i>Instructor in Genito-urinary Surgery</i>
GEORGE G. MORRIS, M. D.	<i>Clinical Instructor in Surgery</i>
GEORGE H. RAWSON, M. D.	<i>Instructor in Anatomy</i>
CHARLES D. EASTON, M. D.	<i>Clinical Instructor in Pediatrics</i>
EARL GRIFFITH BREEDING, A. B., M. S., M. D.,	<i>Instructor in Laryngology and Otology</i>
CYRUS W. CULVER, M. D.	<i>Clinical Instructor in Obstetrics</i>
HERBERT H. SCHOENFELD, M. D.	<i>Clinical Instructor in Surgery</i>
ROBERT S. BEALE, M. D.	<i>Clinical Instructor in Medicine</i>
AUGUSTUS C. GRAY, M. D.	<i>Instructor in Surgery</i>
LYLE M. MASON, M. D.	<i>Clinical Instructor in Medicine</i>
GEORGE N. ACKER, 2d, M. D.	<i>Instructor in Medicine</i>
JOSEPH D. STOUT, Am. D.	<i>Instructor in Physiology</i>
FREDERICK C. SCHREIBER, M. D.	<i>Instructor in Laryngology and Otology</i>
HENRY L. HAYES, M. D.	<i>Instructor in Neurology</i>

THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY

HOSPITAL

STERLING RUFFIN, M. D.	<i>Physician-in-Chief</i>
BUCKNER MAGILL RANDOLPH, M. D.	<i>Associate Physician</i>
COURSEN BAXTER CONKLIN, M. D.	<i>Associate Physician</i>
WILLIAM CLINE BORDEN, M. D.	<i>Surgeon-in-Chief</i>
CAHRLES STANLEY WHITE, M. D.	<i>Associate Surgeon</i>
DANIEL LERAY BORDEN, M. D.	<i>Associate Surgeon</i>

GEORGE NICHOLAS ACKER, M. D.	<i>Pediatrician-in-Chief</i>
CUSTIS LEE HALL, M. D.	<i>Orthopedic Surgeon</i>
FRANCIS RANDALL HAGNER, M. D.	<i>Genito-Urinary Surgeon</i>
HOMER GIFFORD FULLER, M. D.	<i>Associate Genito-Urinary Surgeon</i>
ADAM KEMBLE, M. D.	<i>Associate Genito-Urinary Surgeon</i>
JOHN WESLEY BOVÉE, M. D.	<i>Gynecologist-in-Chief</i>
HURON WILLIS LAWSON, M. D.	<i>Obstetrician-in-Chief</i>
EDGAR PASQUAL COPELAND, M. D.	<i>Associate Pediatrician</i>
RANDOLPH BRYAN CARMICHAEL	<i>Dermatologist-in-Chief</i>
CHARLES AUGUSTUS SIMPSON, M. D.	<i>Associate Dermatologist</i>
CHARLES WILLIAMSON RICHARDSON, M. D.	<i>Laryngologist</i>
WILLIAM THORNWALL DAVIS, M. D.	<i>Ophthalmologist-in-Chief</i>
EDWARD GRANT SEIBERT, M. D.	<i>Associate Laryngologist and Ophthalmologist</i>
ARTHUR C. CHRISTIE, M. D.	<i>Roentgenologist-in-Chief</i>
THOMAS A. GROOVER, M. D.	<i>Roentgenologist</i>
EDWIN A. MERRITT, M. D.	<i>Roentgenologist</i>
OSCAR BENWOOD HUNTER, M. D.	<i>Pathologist</i>
TOMAS CAJIGAS, M. D.	<i>Director of the Clinical Laboratory</i>
BOYCE RICHARDSON BOLTON, M. D.	<i>Resident Physician</i>
WILLIAM MARSHALL BLAND, M. D.	<i>Interne</i>
KANG-Li, M. D.	<i>Interne</i>
HENRY W. B. STIBBS, M. D.	<i>Interne</i>
OLIVE B. SWEET, R. N.	<i>Superintendent of Nurses and Principal of the Training School for Nurses</i>
JOHN BRUCE COPPING	<i>Superintendent</i>

DISPENSARY

STERLING RUFFIN, M. D.	<i>Physician-in-Chief</i>
WILLIAM CLINE BORDEN, M. D.	<i>Surgeon-in-Chief</i>
JOHN WESLEY BOVÉE, M. D.	<i>Gynecologist-in-Chief</i>
HURON WILLIS LAWSON, M. D.	<i>Obstetrician-in-Chief</i>
ALBERT ELWOOD PAGAN, M. D.	<i>Director of the Dispensary</i>

General Medicine

BUCKNER MAGILL RANDOLPH, M. D.	<i>Attending Physician</i>
WILLIAM CABELL MOORE, M. D.	<i>Attending Physician</i>
WILLIAM JOHNSTON MALLORY, M. D.	<i>Attending Physician</i>
ROBERT S. TRIMBLE, M. D.	<i>Attending Physician</i>
THOMAS LINVILLE, M. D.	<i>Attending Physician</i>
FRANK A. HORNADAY, M. D.	<i>Attending Physician</i>
RALPH COHEN, M. D.	<i>Attending Physician</i>
LYLE MILLAN MASON, M. D.	<i>Attending Physician</i>
GEORGE NICHOLAS ACKER, 2d, M. D.	<i>Attending Physician</i>

General Surgery

TRUMAN ABBE, M. D.....	<i>Attending Surgeon</i>
JOHN POTTS FILLERBROWN, M. D.....	<i>Attending Surgeon</i>
GEORGE HENRY RAWSON, M. D.....	<i>Attending Surgeon</i>
CYRUS W. CULVER, M. D.....	<i>Attending Surgeon</i>

Genito-Urinary Diseases

FRANCIS RANDALL HAGNER, M. D.....	<i>Genito-Urinary Surgeon</i>
ADAM KEMBLE, M. D.....	<i>Attending Surgeon</i>
CHARLES O. KNOTT, M. D.....	<i>Attending Surgeon</i>

Gynecology

DANIEL LERAY BORDEN, M. D.....	<i>Attending Gynecologist</i>
ALBERT ELWOOD PAGAN, M. D.....	<i>Attending Gynecologist</i>
HOWARD FRANCIS KANE, M. D.....	<i>Attending Gynecologist</i>

Obstetrics

HURON WILLIS LAWSON, M. D.....	<i>Obstetrician-in-Chief</i>
CYRUS W. CULVER, M. D.....	<i>Attending Obstetrician, Out-Patient Service</i>

Eye, Ear, Throat and Nose

WILLIAM T. DAVIS, M. D.....	<i>Ophthalmologist</i>
EDWARD GRANT SEIBERT, M. D.....	<i>Laryngologist and Ophthalmologist</i>
ALBERT PERKINS TIBBETS, M. D.....	<i>Attending Laryngologist and Otologist</i>
SAMUEL BOYCE POLE, M. D.....	<i>Attending Laryngologist and Otologist</i>
EARL GRIFFITH BREEDING, M. D.....	<i>Attending Laryngologist and Otologist</i>

Pediatrics

COURSON BAXTER CONKLIN, M. D.....	<i>Attending Pediatrician</i>
JOHN CARL ECKHART, M. D.....	<i>Attending Pediatrician</i>

Neurology

JOHN EDWARD LIND, M. D.....	<i>Attending Neurologist</i>
HENRY L. HAYES, M. D.....	<i>Attending Neurologist</i>

Roentengology

ARTHUR C. CHRISTIE, M. D.....	<i>Roentgenologist-in-Chief</i>
THOMAS A. GROOVER, M. D.....	<i>Roentgenologist</i>

Dermatology

CHARLES AUGUSTUS SIMPSON, M. D.....	<i>Attending Dermatologist</i>
GEORGE HENRY RAWSON, M. D.....	<i>Attending Dermatologist</i>

Pathology

OSCAR BENWOOD HUNTER, M. D.....*Pathologist*

Laboratory

TOMAS MOREAU CAJIGAS, M. D.....*Director*

Medical Building

WILLIAM BINFORD KING.....*Librarian*

ANNA ELIZABETH SELLNER.....*Secretary to the Dean*

ELMER SCHATZ.....*Superintendent of the Building*

HISTORICAL

The *Medical School of the George Washington University*, in chronological order of establishment, is the eleventh Medical School in the United States. The first course of lectures began in March 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

In order to increase the facilities for bedside and clinical teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Medical School. In 1902 the old Medical School Building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

EDUCATIONAL POSITION

The Medical School of the University has for several years been a member of the Association of American Medical Colleges. It is one of the medical colleges designated as "Class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

The degree of M. D. given by this University admits the holder to all governmental examinations, including those for the Medical Corps of the United States Army and Navy and the Public Health Service and, with evidence of one year of post graduate work in those States which require hospital internship, will admit a graduate of our Medical School to all state examinations.

The alumni of this school are largely represented in all public services, and have been highly successful in passing the rigid examinations given by them. These facts guarantee the character of the work done by the School and insure its students and graduates all the advantages which accrue from such association and recognition.

BUILDINGS AND OTHER FACILITIES

All the buildings adjoin each other and consist of the Medical School Building, the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city within one block of both systems of car lines. As the Hospital and Dispensary adjoin the School, their clinical facilities are easily accessible to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the School laboratories.

Medical School Building.—A modern, commodious, five-story structure with spacious, well-lighted, well-ventilated lecture and class rooms, laboratories, and student's rooms. It has an elevator service, and is equipped with steam heat, gas, electricity, and all modern improvements.

Laboratories.—Five in number (for anatomy, physiological and clinical chemistry, histology and embryology, physiology and pharmacology and bacteriology and pathology) are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

Medical Library.—Open for study and consultation from 9 a.m. to 4 p.m. with a librarian in charge. It contains at present more than 2000 volumes, and provision is made to add to it as published the important new works on medicine. The standard medical periodicals are regularly received. The library is an excellent working collection, as it affords opportunity to read up adequately on the subjects presented in the courses.

Pathological Museum.—Contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

ADVANTAGE OF LOCATION FOR THE STUDY OF MEDICINE

The city of Washington now has nearly a half million inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of about four thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the faculty.

The *great libraries and museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's office of the United States Army is the most complete medical library in the world, and all leading medical periodicals of the world are subscribed for. All the facilities of this great library are open to *medical students*. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivalled opportunity for studying the conditions met with in military and general surgery. It has on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, and the Department of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many medical facilities of this city, the *Army and Navy Medical Schools* with the large *Army and Navy General Hospitals* have been located here.

Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.

ADMISSION

The requirements for admission to the Medical Schools are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are:

A. The minimum requirements for admission are fifteen units of secondary school work and two years of college work made up as follows:

SECONDARY SCHOOL UNITS

Credit may be granted for the subjects shown in the following list and for any other subjects counted by a standard accredited high school as a part of the requirements for its diploma, provided that at least eleven units must be offered in groups I-V:

<i>Subjects</i>	<i>Units*</i>	<i>Required</i>
Group I, English—		
Literature and composition.....	3-4	3
Group II, Foreign Languages—		
Latin.....	1-4	2.†
Greek.....	1-3	
French or German.....	1-4	
Other foreign languages.....	1-4	
Group III, Mathematics—		
Elementary algebra.....	1	1
Advanced algebra.....	1-1	1
Plane geometry.....	1	
Solid geometry.....	1	
Trigonometry.....	1	

<i>Subjects</i>	<i>Units*</i>	<i>Required</i>
Group IV, History—		
Ancient history.....	$\frac{1}{2}$ -1	1
Medieval and modern history.....	$\frac{1}{2}$ -1	
English history.....	$\frac{1}{2}$ -1	
American history.....	$\frac{1}{2}$ -1	
Civil government.....	$\frac{1}{2}$ -1	
Group V, Science—		
Botany.....	$\frac{1}{2}$ -1	
Zoology.....	$\frac{1}{2}$ -1	
Chemistry.....	1	
Physics.....	1	
Physiography.....	$\frac{1}{2}$ -1	
Physiology.....	$\frac{1}{2}$ -1	
Astronomy.....	$\frac{1}{2}$	
Geology.....	$\frac{1}{2}$ -1	
Group VI, Miscellaneous—		
Agriculture.....	1-2	
Bookkeeping.....	$\frac{1}{2}$ -1	
Business law.....	$\frac{1}{2}$	
Commerical geography.....	$\frac{1}{2}$ -1	
Domestic science.....	1-2	
Drawing, freehand and mechanical.....	$\frac{1}{2}$ -2	
Economics and economic history.....	$\frac{1}{2}$ -1	
Manual training.....	1-2	
Music: Appreciation and harmony.....	1-2	

* A unit is the credit value of at least thirty-six weeks' work of four or five recitation periods per week, each period to be not less than 45 minutes. A point is a subject pursued through one-half the above time. Two points may be considered the equivalent of one unit.

† Both of the required units of foreign language must be of the same language, but the two units may be presented in any one of the language specified.

COLLEGE WORK

	SEMESTER HOURS REQUIRED:
Chemistry.....	12
Physics.....	8
Biology.....	8
English.....	6
Electives.....	26

Chemistry.—Of the twelve semester hours required, eight hours must be made up of general inorganic chemistry (including four semester hours of laboratory work). Qualitative analysis may be counted as general inorganic chemistry. The remaining four semester hours may consist of additional work in general chemistry or of work in analytic or organic chemistry. After January 1, 1922, the four semester hours must consist of organic chemistry.

Physics.—The eight semester hours required must include at least two semester hours in laboratory work. It is urged that this course be preceded by a course in trigonometry.

Biology.—Eight semester hours required, of which four must consist of laboratory work. This requirement may be satisfied by a course of eight semester hours in either general biology or zoology or by a course of four semester hours each in zoology and botany, but not by botany alone.

English Composition and Literature.—The usual introductory college course of six semester hours, or its equivalent, is required.

Electives.—It is recommended that the twenty-six semester hours required include a modern foreign language, comparative vertebrate anatomy, social science and psychology.

A semester hour is the credit value of one-half year's work consisting of one lecture or recitation period per week, each period to be not less than fifty minutes net; at least two hours of laboratory work to be considered as the equivalent of one lecture or recitation period; and the year to be not less than thirty-three weeks of actual work.

B. A. Bachelor's degree from an approved college or University, provided the holder of such degree presents satisfactory credentials, covering college work in chemistry, physics, biology and English as outlined in the preceding paragraphs.

An examination is given by the University in the latter part of May and September of each year to students who are deficient in whole or part of the subjects required for entrance to the Premedical Course. Candidates desiring examination must submit an application for the examination before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of the examination.

The laws relating to the preliminary educational qualifications required of physicians differ in many of the states and candidates are advised that if they meet the premedical and other requirements of this school they will be able to comply with these legal demands of all State Examining Boards in the United States. Any standard lower than that of this institution will not meet the requirements of all the states in the Union.

SPECIAL COURSE FOR ADMISSION TO THE MEDICAL SCHOOL

Courses are offered by the University to meet the requirement in two years of college work necessary to enter the freshman class of Medicine.

First Year

	SEMESTER HOURS
Chemistry 1 and 2.....	10
Zoology 1.....	6
English 1 or 2.....	6
Electives (including preferably French or German)	8
Total.....	30

Second Year

	SEMESTER HOURS
Physics 3 and 2.....	10
Zoology 2.....	6
Chemistry 8 or 23.....	4
Electives (preferably Psychology, Mathematics and Chemistry 7).....	10
Total.....	30

Courses and Degrees offered by the University in addition to or in continuation with the course for the degree of Doctor of Medicine.

The University offers a six-year combination course, by which a student may obtain the degree of Bachelor of Science in Medicine and Doctor of Medicine and a seven-years course for the degrees of Bachelor of Arts and Doctor of Medicine.

ADMISSION TO COLUMBIAN COLLEGE

Applicants for admission to the Freshman Class in Columbian College for the combined courses leading to the degrees of Bachelor of Arts or Bachelor of Science in Medicine and Doctor of Medicine must meet the general admission requirements of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. The fifteen units of the entrance requirements must include English, 3 units; Mathematics, 2½ units, and one of the following languages: Latin, Greek, French, German, or Spanish 2 units. The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

SIX YEAR COURSE FOR THE DEGREES OF BACHELOR OF SCIENCE IN MEDICINE AND DOCTOR OF MEDICINE

Regular students in this course will complete in two years the prescribed work in college, at least twelve semester hours of which must be taken in Columbian College, and the four-year course in the Medical School. On the completion of this six-year course, the student will receive at the same time the degrees of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum for the combined six-year course is as follows:

a. Columbian College

Freshman Year

	SEMESTER HOURS
Chemistry 1 and 2.....	10
English 1 or 2.....	6
French or German.....	6
Mathematics.....	6
Zoology 1.....	6
Total.....	34

Sophomore Year

	SEMESTER HOURS
Chemistry 7 and 8 or 23.....	8
French or German.....	6
Philosophy including Psychology.....	6
Physics 3 and 2.....	10
Zoology 2.....	6
Total.....	36

b. Medical School

The four-year course for the degree of Doctor of Medicine.

SEVEN-YEAR COURSE FOR THE DEGREES OF BACHELOR OF ARTS AND DOCTOR OF MEDICINE

Regular students in this course will complete at least 90 semester-hours as prescribed in Columbian College and the first year course in the Medical School. On completion of the prescribed 90 semester hours of college work and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The hours of prescribed work, at least 12 semester hours of which must be taken in Columbian College, are as follows:

Columbian College:

SUBJECT	SEMESTER HOURS
Zoology, 1, 2.....	12
Chemistry 1, 2, 7 and 8 or 23.....	18
English.....	6
French and German.....	18
History.....	6
Mathematics.....	6
Physics 3 and 2.....	10
Philosophy.....	6
Electives (including not to exceed 30 semester-hours in Medi- cine).....	38
Total.....	120

ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students who have satisfactorily attended one or more terms at any other Class A medical school, and who have the necessary preliminary educational requirements, may be admitted to advanced standing.

Students who have been in attendance upon an Arts course in other accredited colleges or universities may be admitted to advanced standing in any of the premedical courses offered by the University upon examination or upon presentation of properly certified evidence of satisfactory completion of work for which credit is asked.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students to any of the courses, provided they have the educational attainments which will enable them to pursue properly the studies they elect.

ACADEMIC YEAR

The *Academic Year* begins on the last Wednesday in September. It is divided into two half-years of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of thirty-two weeks each, exclusive of vacations and holidays. The next session, the ninety-eighth, begins September 29, 1920, and ends June 8, 1921.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

SYSTEM OF INSTRUCTION

Instruction is carried on by laboratory work, lectures, recitations, bedside instruction, and hospital and dispensary clinics. Particular stress

is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical School are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to ground thoroughly the students in the knowledge which is necessary to a practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed for medical study are no more than sufficient time for the adequate preparation of the general practitioner.

The policy adopted by the School is to give a comprehensive, well graded and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Medical Examining Boards.

ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table. Major subjects are in italics:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
<i>Anatomy.</i>	<i>Anatomy.</i>	<i>Medicine.</i>	<i>Medicine.</i>
<i>Histology.</i>	<i>Physiological</i>	<i>Surgery.</i>	<i>Surgery.</i>
<i>Embryology.</i>	<i>Chemistry.</i>	Fractures and	Orthopaedics
<i>Physiology.</i>	<i>Pathology.</i>	Dislocations.	Genito-Urinary
<i>Chemistry.</i>	<i>Bacteriology.</i>	Clinical	Diseases.
<i>Ethics.</i>	<i>Materia Medica.</i>	Microscopy.	Operative
	<i>Pharmacology.</i>	<i>Obstetrics.</i>	<i>Surgery.</i>
	Minor Surgery.	<i>Therapeutics.</i>	Military
	Physical	Roentgenology.	Surgery and
	Diagnosis.	Radiotherapy.	Sanitation.
	Pathological	<i>Gynecology.</i>	<i>Obstetrics.</i>
	Physiology.	Medical	<i>Gynecology.</i>
	Hygiene.	Jurisprudence.	Laryngology
	Psychology.	Clinical	and Otology.
		Chemistry.	Ophthalmology
		Dietetics.	Dermatology.
		Tropical	Psychiatry.
		Medicine.	Pediatrics.
		<i>Clinics.</i>	Neurology.
			Ethics.
			<i>Clinics.</i>

The *clinics* above listed comprise the medical, surgical, and other clinics given in the third and fourth years, and are as hereafter noted under the announcements of the different clinical subjects.

OUTLINE OF CURRICULUM
HOURS OF REQUIRED WORK IN EACH SUBJECT

(On the basis of 32 actual weeks in each year)

SUBJECT	YEARS	HOURS	
		Totals*† Didac- tic, Lab. and Clinical	Didactic not to exceed
Anatomy.....	I	440	90
Anatomy.....	II	210	30
		— 650	— 120
Histology and Embryology.....	I	267	60
		— 267	— 60
Chemistry.....	I	308	90
Chemistry.....	II	100	30
		— 408	— 120
Physiology.....	I	184	72
Physiology.....	II	68	32
		— 252	— 104
Psychology.....	II	32	32
		— 32	— 32
Bacteriology.....	II	140	30
Pathology.....	II	282	60
		— 408	— 90
Hygiene.....	II	32	32
		— 32	— 32
Dietetics.....	III	24	24
		— 24	— 24
Pharmacology.....	II	160	28
Materia Medica.....	II	48	48
		— 208	— 76
Therapeutics.....	III	64	64
Radiotherapy.....	III	8	8
		— 72	— 72
Gynecology.....	III and IV	144	48
		— 144	— 48
Obstetrics.....	III and IV	192	64
		— 192	— 64

* The number of hours represents the amount of time each student devotes to the course. In addition to the hours scheduled in the third and fourth years, each student is required to do satisfactorily considerable practical work; he is assigned to cases in hospitals, is required to assist at operations, to attend cases of labor, administer anaesthetics, attend autopsies, and to take the history of cases. Fully 120 hours annually are required to do this unscheduled work.

† Subject to variation.

SUBJECT	YEARS	HOURS (continued)	
		Totals Didactic, Lab. and Clinical	Didactic not to exceed
Medicine.....	II, III, IV		
General Medicine.....		606	200
Clinical Microscopy.....		48	16
Physical Diagnosis.....		80	40
Tropical Diseases.....		12	12
Dermatology.....		48	12
Pediatrics.....		120	18
Neurology.....		64	24
Psychiatry.....		42	12
Medical Jurisprudence.....		30	30
Clinical Chemistry.....		48	12
		— 1098	— 376
Surgery.....	II, III, IV		
General Surgery.....		540	144
Minor Surgery.....		40	20
Radiography.....		16	0
Fractures, etc.....		16	16
Military Surgery and Sanitation.....		16	16
Ophthalmology.....		64	16
Otology and Laryngology.....		60	24
Genito-Urinary Surgery.....		48	16
Orthopedics.....		48	16
		— 848	— 268
Grand totals.....		4649	1486

ANATOMY

GEORGE B. JENKINS, M. D.....	<i>Professor</i>
JOHN KONSTANTIN BUTKIEWICZ, D. D. S.....	<i>Professor of Histology</i>
WILLIAM BINFORD KING.....	<i>Instructor</i>
GEORGE HENRY RAWSON, M. D.....	<i>Instructor</i>

The instruction in the various anatomical sciences—gross human anatomy, neurology, embryology and histology—is carried on by the Division of Anatomy of which the Professor of Anatomy is the head.

This insures complete correlation of the various anatomical branches and adequate instruction in each.

During the first year the course in Gross Anatomy is given mainly by practical laboratory work.

The greater portion of the course is given during the first year, thus enabling the student to apply his early knowledge of Anatomy to his other

branches of study. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting room work is supplemented by demonstration, recitation and lectures illustrated by lantern slides, models, diagrams and special dissections. The systematic study of the gross and minute anatomy of the central nervous system and organs of special sense is pursued by means of lectures, recitations, and laboratory work.

In the second year a course in applied anatomy is given, in which recitations and laboratory demonstrations, and special dissections are used to familiarize the student thoroughly with the subjects.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Anatomy.....	I	440	90
Anatomy.....	II	210	30
		— 650	— 120

In Histology instruction is given in the care and use of the microscope and in the preparation of tissues for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures, recitations and stereopticon demonstrations.

The course in Embryology is devoted to the study of marine material, showing maturation, impregnation, segmentation, etc., and to series of chick and mammalian embryos, special stress being laid upon the development of the foetal membranes and organs. Lectures, recitations and demonstrations with laboratory models are also given.

SUBJECT	YEAR	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Histology and Embryology.....	I	267	60
		— 267	— 60

PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph. D., LL. D., M. D. *Professor*
 EUGENE R. WHITMORE, B. S., M. D. *Associate Professor*
 JOSEPH D. STOUT, Ph. D., M. D. *Associate Professor*

The course in Physiology consists of lectures, recitations, demonstrations, laboratory exercises and conferences during the first and second years. It begins in the second-half of the first year, so that the student is early in his

course in medicine introduced to the functional viewpoint. The functions of the nervous system and special senses, of the blood, of the heart and circulatory system, of glands, of the digestive system, of the respiratory mechanisms, and of reproduction are considered by means of lectures and recitations, and, as far as practicable, experimentally. In the laboratory each student performs the main experiments illustrating the facts regarding bodily function, and demonstration experiments are given to those functions which are too complex for the student to perform himself. In this laboratory work each student is required to keep records of his experiments, and each experiment is supervised and the record criticized and checked by one of the instructors before the student leaves the laboratory for the day. The class is divided into sections for oral recitations, which are supplemented by written recitations.

After the completion of the work in normal physiology, in the second year a series of laboratory exercises on the physiological action of drugs is given (see the announcement under Department of Pharmacology,) and in conjunction with that laboratory work lectures are given and recitations are held in which the functional disturbances in disease are considered. In this course special attention is given to the abnormalities of action of the heart and circulatory system, to the mechanical disturbances in respiration, and to the disturbances of the nervous system and the special senses. By this course it is intended to bring the course in normal physiology into closer relations with the succeeding courses in Pathology, Therapeutics and General Medicine.

The course in Psychology aims to give, by lectures and conferences, the main facts regarding mental processes, and to develop the psychological aspect of medicine, upon which so much emphasis has recently been laid. The course is primarily medical in its treatment and thus deals with pathological as well as normal mental phenomena, but without encroaching upon the courses in Psychiatry and Neurology.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Physiology.....	I	184	72
Physiology.....	II	68	32
		— 252	— 104
Psychology.....		32	32

CHEMISTRY

RALPH EMERSON MYERS, A. B., A. M., M. D.....*Professor*
 JOSEPH HYRAM ROE, A. B., A. M.....*Associate Professor*

Inorganic Chemistry.—A series of recitations, in which the subject is reviewed and its relation to medicine emphasized.

Organic Chemistry.—A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

Detection of Common Poisons.—A didactic and laboratory course on the identification of poisons.

Physiological Chemistry.—A series of lectures, recitations and laboratory work on food stuffs, including carbohydrates, proteins and fats, their properties, reactions, digestion, absorption and assimilation. Careful consideration is given to enzymes and to the various secretions of the body.

Clinical Chemistry.—A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Chemistry.....			
Inorganic Review	I	258	90
Organic			
Detection of Common Poisons			
Physiological.....	I, II	150	30
		— 408	— 120
*Clinical Chemistry.....	III	48	12

* See also announcement under Medicine.

PHARMACOLOGY

RALPH EMERSON MYERS, A. B., M. A., M. D.....*Professor*
.....*Assistant Professor*

1. *Pharmacology.*—Materia Medica and Prescription Writing required of all second year medical students, last 8 weeks of the first semester.

This course is a prerequisite to all other courses in Pharmacology. Special emphasis is laid upon laboratory methods of observation and of intelligent note-taking. The essentials of prescription writing are taught and the student is introduced to the official pharmacopoeal preparations. Enough pharmacy is introduced to teach the student to use the Pharmacopoea intelligently, and to emphasize the importance of the term "Official Preparation." Much interesting didactic material is furnished for the class conferences, at which time the type preparations made by the class are demonstrated and discussed.

2. *Systematic Pharmacology*.—Required of all second year medical students. Five hours a week during the second semester.

The subject-matter of this course is essentially that outlined in Cushny's Text-Book of Pharmacology, supplemented by a consideration of those newer and "non-official" remedies that have acquired pharmacological interest. Special care is taken to adapt the material to the practical needs of the medical student. Emphasis, however, is laid upon the pharmacological action of drugs as a pure science in order that a critical attitude toward drugs may be instilled. Experience has demonstrated that this develops originality in prescription writing based upon a knowledge of pharmacology. The subject of incompatibilities is taught by compounding type prescriptions compiled from the medical literature and by discussion in class conferences.

The last part of the course introduces the student to the method of applying his previous chemical and physiological information by testing for drugs and their derivatives excreted from the body. This lays a foundation for the more technical information relating to the absorption, excretion, and action of drugs in the tissues.

3. *Pharmacodynamics*.—Second semester. Required of all second year medical students. Prerequisite pharmacology 1.

This course runs parallel with pharmacology 2. Being a laboratory course, it furnishes much didactic material used in the class conferences and lectures of pharmacology No. 2.

The laboratory practice begins with simple experiments on absorption, excretion and local action of drugs, followed by experiments upon frogs, turtles and lower mammals. As the student's ability in handling biological material develops, experiments involving the more difficult technic of pharmacological experimentation are introduced.

Special emphasis is laid upon the student's ability to secure results and to record and analyze his curves and records. Special conferences are held periodically in which the results and the records are discussed and the work of the class as a whole is properly coördinated.

4. *Special Pharmacodynamics and Toxicology*.—(Credit according to work done.)

This course is open to advance students and special workers who desire training in toxicology and methods of biological assay.

5. *Research in Pharmacology and Chemo-Therapy*.—The Cooper Research Laboratory of Pharmacology is an endowed laboratory and offers excellent opportunities for advanced scientific work in pharmacology and chemo-therapy. This laboratory is equipped with high grade apparatus and chemicals for quantitative work. It provides an excellent shop equipment for the building of special apparatus frequently demanded in problems requiring an original technic. Equally important are the excellent research

reference library facilities. Washington offers a cosmopolitan clinic and for problems of chemo-therapy the University Hospital and Dispensary are in the adjoining building and are at the laboratory's disposal.

MATERIA MEDICA AND THERAPEUTICS

BUCKNER MAGILL RANDOLPH, M. D.....*Professor*

(1) Systematic lectures and recitations on the physiological action of drugs and other remedial agents, their therapeutic use in disease; their modes of administration; and a review of their toxicology. (2) A review of the principles of prescription writing, with practical exercises by students in writing prescriptions in the metric system. (3) Lectures in applied therapeutics, devoted to the study of the application of remedial measures to morbid physiological and pathological states, as they occur clinically.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Pharmacology.....	II	170	28
Materia Medica and Toxicology.....	II	48	48
Therapeutics.....	III	64	64
Radiotherapy.....	III	8	8
		— 290	— 148

DIETETICS

FRANK ADELBERT HORNADAY, S. B., M. D.....*Professor*

A course of lectures on the physiology of nutrition and principles of feeding in health and disease.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Dietetics.....	III	24	24

BACTERIOLOGY AND PATHOLOGY

OSCAR BENWOOD HUNTER, A. M., M. D.....*Professor*

NOLAN VON CHARPENTIER LEWIS, M. D.,

Professor of Experimental Pathology

.....*Associate Professor of Pathology*

TOMÁS CAJIGAS, M. D.....*Associate Professor of Bacteriology*

WILLIAM BROWN CARR, M. D.....*Instructor in Morbid Anatomy*

BACTERIOLOGY

The didactic portion of the course in Bacteriology consists of a series of about thirty formal lectures in which the entire field of bacteriology in-

cluding immunology in its application to human medicine and well are is considered. The first few lectures are necessarily limited to the consideration of the general principles of the science after which the pathogenic microorganisms are discussed in a systematic sequence, with the theories of immunity treated of in appropriate places.

In the laboratory portion of the course which occupies about three-quarters of the total time devoted to the subject the students first prepare all the standard culture media and learn the general principles of bacteriologic technic from the study of about a dozen typical, widely different non-pathogenic organisms. Subsequently twenty-five to thirty pathogenic bacteria are carefully examined by microscopic, cultural and serologic methods. The students prepare as far as practicable such special media as are needed for this latter work. In addition to this systematic examination of characteristic organisms the students test the efficiency of the commonly employed germicides, prepare a vaccine, and in groups prepare agglutinating, hemolytic and other immune serums and use these as commonly employed in diagnosis. In connection with the preparation of culture media the principles of sterilization are covered. In the microscopic examination of bacteria the students are trained in the use of the high powers of the microscope, in the use of dark ground illumination, and are taught to make microscopic measurements.

During the course where occasion arises in connection with special cases of interest in the University Hospital or elsewhere unusual infections or rarely occurring processes of diagnosis, etc., are demonstrated. The routine bacteriologic and serologic work of the Hospital is done in the same laboratory where the students are working so that they have ample opportunity to observe the practical application of bacteriology.

PATHOLOGY

In Pathology, the division of the course into laboratory and lecture teaching is followed, the amount of time devoted to each being about twice the corresponding time in Bacteriology. General pathology, covering inflammation, repair, degenerations, the effects of plant (including bacteria) and animal parasites on the body, the effects of chemical and physical agents, the formation of new growths, etc., is first considered. This is followed by the special pathology of the organs and of the specific diseases.

The laboratory work consists primarily in the histologic study of diseased tissues and neoplasms. About two hundred sections are stained and mounted by each student and become his individual property. These sections are carefully examined and studied by the student who makes colored pencil drawings of the characteristic lesions shown by them.

The microscopic study is supplemented by that of post-mortem material and that from the operating room and by specimens in the museum thus affording a knowledge of gross morbid anatomy.

Varying in number with the extent of material afforded, students have the opportunity of training in the details of post-mortem technic from the autopsy through the preparation, sectioning, and staining of the tissues to be studied, to their final diagnosis and report.

CLINICAL MICROSCOPY

In the course in Clinical Microscopy the student is trained in the counting of the red and the white blood cells, in the various methods of hemoglobin estimation, in differential leucocyte counting, in the study of malarial parasites, and such other parasites of the blood as opportunity affords, in the estimation of the coagulation time of the blood, etc., in the microscopic study of the sediments in normal and pathologic urines, in the microscopic examination of stomach contents, of the feces, including a detailed study of animal parasites and their eggs, in the microscopic examination of sputum, of spinal fluids, pleural exudates, etc., as material and opportunities afford. The significance and value of these findings as applied to pathology and diagnosis are considered.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Bacteriology.....	II	140	30
Pathology.....	II	282	60
		— 422	— 90
Clinical Microscopy.....		48	16

MEDICINE

STERLING RUFFIN, M. D.....*Professor*
 GEORGE NICHOLAS ACKER, A. M., M. D.....*Professor of Pediatrics*
 THOMAS ASH CLAYTOR, M. D.....*Clinical Professor of Medicine*
 RANDOLPH BRYAN CARMICHAEL, M. D.....*Professor of Dermatology*
 WILLIAM ALANSON WHITE, M. D.,

Professor of Psychiatry and Clinical Professor of Neurology

EDWARD RHODES STITT, A. B., M. D.....*Professor of Tropical Medicine*
 GLENMORE F. CLARK, M. D.,...*Associate Professor of Tropical Medicine*
 EDGAR SNOWDEN, M. D.....*Professor of Hygiene*
 HARRY S. BERNTON, M. D.....*Professor of Medical Jurisprudence*
 FRANK LEECH, M. D.....*Clinical Professor of Medicine*
 FRANK ADELBERT HORNADAY, S. B., M. D.

Professor of Dietetics and Associate in Medicine

HARRY HAMPTON DONNALLY, A. M., M. D.,

Clinical Professor of Pediatrics

EDGAR PARQUAL COPELAND, M. D.....*Associate in Pediatrics*
 WILLIAM CABELL MOORE, M. D.....*Associate in Medicine*

CHARLES AUGUSTUS SIMPSON, M. D.....	<i>Associate in Dermatology</i>
COURSEN BAXTER CONKLIN, S. B., M. D.....	<i>Associate in Medicine</i>
ROSS M. CHAPMAN.....	<i>Clinical Associate in Psychiatry</i>
WILLIAM JOHNSTON MALLORY, M. D.....	<i>Associate in Medicine</i>
THOMAS LINVILLE, M. D.....	<i>Clinical Associate in Medicine</i>
EVERETT MUNROE ELLISON, A. M., M. D.....	<i>Clinical Associate</i>
ROBERT SAMUEL TRIMBLE, M. D.....	<i>Clinical Instructor in Medicine</i>
WILLIAM HOUSTON LITTLEPAGE, M. D.,	<i>Clinical Instructor in Medicine</i>
JAMES CHARLES HASSALL, M. D.,	
	<i>Clinical Associate in Psychiatry and Clinical Neurology</i>
MARY O'MALLEY, M. D.,	<i>Clinical Instructor in Psychiatry and Neurology</i>
WILLIAM DAVID TEWKESBURY, M. D.,	<i>Clinical Instructor in Medicine</i>
CARROL E. BINGMAN, M. D.....	<i>Clinical Instructor in Medicine</i>
ROBERT S. BEALE, M. D.....	<i>Clinical Instructor in Medicine</i>
LYLE M. MUSON, M. D.....	<i>Clinical Instructor in Medicine</i>
GEORGE N. ACKER 2nd., M. D.....	<i>Instructor in Medicine</i>

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the later two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections, which are required to attend the daily dispensary service in the University Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students affords a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of their illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheatre clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Saint Elizabeth's Hospital, where there is a great wealth of material (see announcement of Psychiatry and Clinical Neurology.)

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab. Clinical	Didactic not to exceed
Medicine.....	II, III, IV		
General Medicine.....		606	200
*Clinical Microscopy.....		48	16
†Clinical Chemistry.....		48	12
Physical Diagnosis.....		80	40
Tropical Diseases.....		12	12
Dermatology.....		48	12
Pediatrics.....		120	18
Neurology.....		64	24
Psychiatry.....		42	12
Medical Jurisprudence.....		30	30
		—1098	— 376

* See also announcement under Bacteriology and Pathology.

† See also announcement under Chemistry.

TROPICAL MEDICINE

EDWARD RHODES STITT, A. B., M. D.,..... *Rear Admiral U. S. N., Professor*
 GLENMORE FORD CLARK, M. D.,

Lieutenant Commander, Medical Corps, U. S. N., Associate Professor.

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

PSYCHIATRY AND CLINICAL NEUROLOGY

WILLIAM ALANSON WHITE, M. D., Superintendent of

Saint Elizabeth's Hospital..... *Professor*

ROSS McCLURE CHAPMAN, M. D..... *Clinical Associate*

MARY O'MALLEY, M. D..... *Instructor*

JOSEPH D. STOUT, Ph. D..... *Instructor*

A series of lectures and clinics is given upon the subject of the psychoses in its various forms.

These clinics are given at Saint Elizabeth's Hospital which, with its more than three thousand beds, affords one of the largest clinics in this country.

Students are taught in the same classes with students of the Army and Navy Medical Schools.

PEDIATRICS

GEORGE NICHOLAS ACKER, A. M., M. D.....	<i>Professor</i>
HARRY HAMPTON DONNALLY, M. D.....	<i>Clinical Professor</i>
EDGAR PASQUAL COPELAND, M. D.....	<i>Associate</i>
CHARLES WHEATLEY, M. D.....	<i>Clinical Associate</i>

Didaetic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

PHYSICAL DIAGNOSIS

WILLIAM CABELL MOORE, M. D.....	<i>Associate</i>
THOMAS LINVILLE, M. D.....	<i>Clinical Associate</i>
FRANK ADELBERT HORNADAY, S. B., M. D.....	<i>Instructor</i>

Instruction is given in the principles and methods of physical examination by means of recitations, section work or normal subjects, and with clinical cases which typically represent diseased conditions.

DERMATOLOGY

RANDOLPH BRYAN CARMICHAEL, M. D.....	<i>Professor</i>
CHARLES AUGUSTUS SIMPSON, M. D.....	<i>Associate</i>

The lectures in this course will be principally clinical, supplemented by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

MEDICAL JURISPRUDENCE

HARRY S. BERNTON, M. D.....	<i>Professor</i>
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This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

SURGERY

WILLIAM CLINE BORDEN, M. D.....	<i>Professor</i>
CHARLES WILLIAMSON RICHARDSON, M. D.,	

Professor of Laryngology and Otology

AURELIUS RIVES SHANDS, M. D.	<i>Clinical Professor of Orthopedic Surgery</i>
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FRANCIS RANDALL HAGNER, M. D.,	
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Professor of Genito-Urinary Diseases and Venereal Diseases

LUTHER HALSEY REICHELDERFER, M. D.	<i>Clinical Professor</i>
WM. H. MONCRIEF, M. D.,	<i>Professor of Military Surgery and Sanitation</i>
OSCAR ADDISON MACK McKIMMIE, M. D.,	<i>Clinical Professor of Laryngology and Otology</i>
THOMAS CHARLES MARTIN, M. D.	<i>Professor of Proctology</i>
CURTIS LEE HALL, M. D.	<i>Professor of Orthopedic Surgery</i>
HARRY HYLAND KERR, M. D.	<i>Clinical Professor</i>
WILLIAM PINKEY REEVES, M. D.	<i>Clinical Professor</i>
WILLIAM THORNWALL DAVIS, M. D.	<i>Professor of Ophthalmology</i>
CHARLES STANLEY WHITE, M. D.	<i>Associate Professor</i>
DANIEL LERAY BORDEN, A. M., M. D.	<i>Associate Professor</i>
WILLIAM F. SOWERS, M. D.	<i>Clinical Associate</i>
ARTHUR C. CRISTIE	<i>Professor of Roentgenology</i>
THOMAS A. GROOVER, M. D.	<i>Associate Professor of Roentgenology</i>
EDWARD GRANT SEIBERT, M. D.,	<i>Associate in Ophthalmology and Laryngology</i>
EDWIN C. MERRITT, M. D.	<i>Associate in Roentgenology</i>
JOHN POTTS FILLEBROWN, M. D.	<i>Clinical Instructor</i>
ADAM KEMBLE, M. D.	<i>Associate in Genito-Urinary Surgery</i>
HOMER GIFFORD FULLER, M. D.,	<i>Clinical Instructor in Genito-Urinary Surgery</i>
CLINE N. CHIPMAN, M. D.	<i>Instructor in Anaesthesia</i>
ALBERT PERKINS TIBBETS, M. D.,	<i>Clinical Instructor in Laryngology and Otology</i>
HARRY SAMUEL LEWIS, M. D.	<i>Clinical Instructor</i>
WILLIAM BERRY MARBURY, M. D.	<i>Instructor</i>
SAMUEL BOYCE POLE, M. D.,	<i>Clinical Instructor in Laryngology and Otology</i>
SAMUEL H. GREENE, M. D.	<i>Instructor in Laryngology and Otology</i>
THOMAS M. FOLEY, M. D.	<i>Instructor in Orthopedic Surgery</i>
GEORGE H. MORRIS, M. D.	<i>Clinical Instructor</i>
WILLIAM G. YOUNG, M. D.,	<i>Clinical Instructor in Genito-Urinary Surgery</i>
EARL GRIFFITH BREEDING, A. B., M. S., M. D.,	<i>Clinical Instructor in Laryngology and Otology</i>
CHARLES O. KNOTT, M. D.	<i>Instructor in Genito-Urinary Surgery</i>
HERBERT H. SCHÖNFELD, M. D.	<i>Clinical Instructor</i>
AUGUSTUS C. GRAY, M. D.	<i>Instructor</i>
FREDERICK C. SCHREIBER, M. D.,	<i>Instructor in Laryngology and Otology</i>

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors

who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course of illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anaesthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheatre clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown.

Ward clinics and bedside instruction are made a prominent part of the course. The classes are divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals and dispensaries. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Practical work is required of each student in the preparation of dressings and sterilization of instruments. Each student is required to give, under instruction, at least six anaesthesias and to assist in at least six operations.

Thorough courses are given in operative surgery and proctology.

SUBJECT	YEARS	HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
Surgey.....	II, III, IV		
General Surgery.....		540	144
Minor Surgery.....		40	20
Radiography.....		16	0
Fractures, etc.....		16	16
Military Surgery and Sanitation....		16	16
Ophthalmology.....		64	16
Laryngology and Otology.....		60	24
Genito-Urinary Surgery.....		48	16
Orthopedics.....		48	16
		— 848	— 268

ORTHOPEDICS

CURTIS LEE HALL, M. D.....	<i>Professor</i>
AURELIUS RIVES SHANDS, M. D.....	<i>Clinical Professor</i>
THOMAS MADDEN FOLEY, M. D.....	<i>Instructor</i>

A course of lectures and recitations on the pathology, etiology, course termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

RADIOGRAPHY

ARTHUR C. CHRISTIE, M. D.....	<i>Professor</i>
THOMAS A. GROOVER, M. D.....	<i>Associate Professor</i>
EDWIN A. MERRITT, M. D.....	<i>Associate</i>

A fully equipped X-ray laboratory is maintained in the University Hospital and Dispensary. Students of the third and fourth year classes are assigned in sections for instructions in the use of apparatus and the application of radiographs and fluoscopic examinations to diagnosis.

GENITO-URINARY DISEASES

FRANCIS RANDALL HAGNER, M. D.....	<i>Professor</i>
ADAM KEMBLE, M. D.....	<i>Associate</i>
HOMER GIFFORD FULLER, M. D.....	<i>Clinical Instructor</i>
WILLIAM G. YOUNG, M. D.....	<i>Clinical Instructor</i>
CHARLES O. KNOTT, M. D.....	<i>Clinical Instructor</i>

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

MILITARY SURGERY AND SANITATION

WM. H. MONCRIEF, M. D., Colonel, Med. Corps., U. S. A.....	<i>Professor</i>
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The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from a collection made after years of study and experimentation.

The use of the new armaments in recent wars and the characteristic features of the wounds caused by them, as well as the treatment of gunshot wounds in peace and war are dealt with.

Lectures on Military Hygiene are also given.

OPHTHALMOLOGY

WILLIAM THORNWALL DAVIS, M. D.....	<i>Professor</i>
DANIEL KERFOOT SHUTE, A. B., M. D.....	<i>Clinical Professor</i>
EDWARD GRANT SEIBERT, M. D.....	<i>Clinical Instructor</i>
EARL GRIFFITH BREEDING, A. B., M. S., M. D.....	<i>Clinical Instructor</i>

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction in the University Dispensary and in the Episcopal Eye, Ear and Throat Hospital.

LARYNGOLOGY AND OTOTOLOGY

CHARLES WILLIAMSON RICHARDSON, M. D.....	<i>Professor</i>
OSCAR ADDISON MACK MCKIMMIE, M. D.....	<i>Clinical Professor</i>
EDWARD GRANT SEIBERT, M. D.....	<i>Instructor</i>
ALBERT PERKINS TIBBETS, A. B., M. D.....	<i>Clinical Instructor</i>
SAMUEL HARRISON GREENE, M. D.....	<i>Clinical Instructor</i>
SAMUEL BOYCE POLE, M. D.....	<i>Clinical Instructor</i>
EARL G. BREEDING, M. D.....	<i>Clinical Instructor</i>
FREDERICK C. SCHREIBER, M. D.....	<i>Clinical Instructor</i>

The course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

OBSTETRICS

HURON WILLIS LAWSON, S. M., M. D.....	<i>Professor</i>
WILLIAM SINCLAIR BOWEN, M. D.....	<i>Clinical Professor</i>
EDGAR SNOWDEN, M. D.....	<i>Clinical Associate</i>
ALBERT E. PAGAN, M. D.....	<i>Associate</i>
HOWARD FRANCIS KANE, A. B., M. D.....	<i>Instructor</i>
CYRUS W. CULVER, M. D.....	<i>Clinical Instructor</i>

The course in obstetrics comprises lectures, recitations, laboratory demonstrations and clinical instruction and extends over the third and fourth years. The lectures serve to outline the subject-matter and the recitations insure careful preparation on the part of the student. Special laboratory studies dealing with anatomy, embryology and pathology in relation to obstetrics are conducted in the different laboratories concerned. Models, manikins and cadavers are utilized in teaching the mechanism of labor and obstetrical operations. Clinical instruction is given to the classes in small sections at different hospitals and in the out-patient obstetrical service. Beginning about the middle of the third year the student is given practical instruction in making antepartum examinations and he also observes the management of labor cases. During the fourth year he conducts, under the supervision of a paid instructor, twelve labor cases in the large and well-organized out-patient maternity service and submits written reports upon the cases attended.

SUBJECT	YEARS	HOURS	
		Totals	Didactic
		Didactic and Clinical	not to exceed
Obstetrics.....	III and IV	192†	64

† The total number of clinic hours cannot be given, as each student is required to attend twelve classes, exclusive of the demonstration work and Ward and Dispensary Clinics above enumerated.

GYNECOLOGY

JOHN WESLEY BOVÉE, M. D.....	<i>Professor</i>
ALBERT LIVINGSTON STAVELY, M. D.....	<i>Clinical Professor</i>
GIDEON BROWN MILLER, M. D.....	<i>Clinical Professor</i>
J. LEWIS RIGGLES, M. D.....	<i>Associate</i>
ALBERT E. PAGAN, M. D.....	<i>Associate</i>
NELSON DUVAL BRECHT, M. D.....	<i>Instructor</i>
VIRGIL B. JACKSON, M. D.....	<i>Clinical Instructor</i>

Gynecology as taught in the third year comprises a course of lectures, text-book recitations and clinical instruction. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one or two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater and ward clinics given by the Professor of Gynecology and his assistants.

SUBJECT	YEARS	HOURS	
		Totals	Didactic
		Didactic and Clinical	not to exceed
Gynecology.....	III and IV	144	48

HYGIENE

EDGAR SNOWDEN, M. D.....	<i>Professor</i>
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The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

SUBJECT	YEARS	HOURS	
		Totals	Didactic
		Didactic and Clinical	not to exceed
Hygiene.....	II	32	32

ETHICS

The subject of ethics as given in the order of instruction will comprise didactic lectures on personal ethics in the first year and on medical ethics in the fourth year. Instruction will be given concerning personal hygiene,

care of laboratory equipment, general conduct and adaptability for the profession.

CLINICAL FACILITIES

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

UNIVERSITY HOSPITAL AND THE UNIVERSITY DISPENSARY.

H Street, between Thirteenth and Fourteenth Streets N. W. and adjacent to the Medical Building.—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Medical School, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical work. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually.

The staff is composed of members of the Faculty of Medicine.

GARFIELD MEMORIAL HOSPITAL

Florida Avenue and Tenth Street N. W.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital.

Members of the Faculty on the visiting staff: Professors CLAYTOR, and LEECH, Clinical Medicine; Professors REICHELDERFER and KERR and Dr. PAGAN, Clinical Surgery; Professors STAVELY and MILLER, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology; Professor DAVIS, Ophthalmology, Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician; Professor BOWEN, Clinical Obstetrics; Dr. MERRITT, Radiography.

CHILDREN'S HOSPITAL

W Street, between Twelfth and Thirteenth Streets N. W.—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department, to which students are regularly assigned for clinical instruction.

Members of the Faculty on the visiting staff: Professor YARROW, Consulting Physician, Professors REICHELDERFER and KERR, Clinical Surgery; Professors ACKER, LEECH and DONNALLY, and Dr. COPELAND, Clinical Medicine; Dr. HALL, Orthopedic Surgery.

PROVIDENCE HOSPITAL

Second and D Streets S. E.—Four hundred and ten beds and a large dispensary service is open for clinical instruction by members of the visiting staff.

EMERGENCY HOSPITAL AND CENTRAL DISPENSARY

1711 New York Avenue.—The hospital has 100 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery, particularly in fractures and dislocations which are taught in regular clinics by the instructor in this subject.

Members of the faculty on the visiting staff: Professor HAGNER, Clinical Genito-Urinary Diseases; Professors MITCHELL and WHITE and Drs. JACKSON and LEWIS, Surgery; Dr. LITTLEPAGE, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS and Dr. FOLEY, Orthopedics; Professor SHUTE, Ophthalmology; Dr. ELLISON, Director of Clinics.

COLUMBIAN HOSPITAL FOR WOMEN

Twenty-fifth Street and Pennsylvania Avenue N. W.—This hospital has 40 charity beds for diseases peculiar to women, and 40 charity maternity beds. Both the obstetrical and the gynecological services are particularly good and are fully utilized for students.

Members of the Faculty on the visiting staff: Professors BOVÉE and MILLER, and Drs. D. L. BORDEN, RIGGLES and SULLIVAN, Clinical Gynecology; Professors LAWSON and BOWEN and Drs. RIGGLES and SNOWDEN, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professors RUFFIN and RANDOLPH, Visiting Physicians; Dr. ABBE, Surgery; Dr. COPELAND, Pediatrics.

ST. ELIZABETH'S HOSPITAL

This hospital is maintained by the United States Government. It has 4,000 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE, and Drs. CHAPMAN and O'MALLEY. Other members of the Faculty on service at this hospital are Professor FRANZ and Professor LEWIS; Professor SHUTE, Consulting Ophthalmologist; Professor RUFFIN, Consulting Physician; Professor BOVÉE, Consulting Gynecologist.

THE EPISCOPAL EYE, EAR, NOSE, AND THROAT HOSPITAL

Fifteenth Street, between L and M Streets N. W.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Professor McKIMMIE and Dr. GREENE, Clinical Otology and Laryngology; Professor DAVIS, Ophthalmology; Professor ACKER, Consulting Physician; Dr. SIMPSON, Dermatology; Dr. WHITE, Consulting Surgeon.

CASUALTY HOSPITAL

Massachusetts Avenue N. E.—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Professor REEVES and Dr. ROGERS, Clinical Surgery; Dr. HALL, Orthopedic Surgery; Dr. KANE, Obstetrics.

TUBERCULOSIS HOSPITAL

Fourteenth and Upshur Streets N. W.—Members of the Faculty on its staff: Professor CLAYTOR, and Dr. TEWKSBURY, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

CLASSIFICATION AND ADVANCEMENT OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year and fourth year.

Proficiency in all subjects is marked on a scale of 100. The passing grade in each subject is 75.

Examinations are held at the end of the course in each subject. Students who fail to appear at a regular examination will not be examined until the next regular examination except by special permission of the Advisory Committee of the Faculty. For special examinations, a fee of ten dollars will be charged for each subject.

A student who has failed in any subject shall not be advanced unless his case is especially meritorious and then only by authority of the Advisory Committee of the Faculty. A student who has failed in a subject may, in the discretion of the Advisory Committee, be required to make it up in the September examinations.

A student who fails of graduation, may if approved by the Advisory Committee, be re-examined for graduation in the September examinations.

A student allowed to take the September examinations either for graduation or advancement, will be required to take examinations in such subjects as the Advisory Committee may direct.

A student allowed to repeat a year will be required to take such subjects and such examinations as may be directed by the Advisory Committee.

A student who fails of advancement after repeating any one of the first three years or fails of graduation after repeating the final year will not be permitted to maintain his connection with the school.

REQUIREMENTS FOR GRADUATION

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of 32 weeks each in four separate years; must have satisfactorily completed all his courses and passed all his examinations. He must be

present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as having graduated with distinction. If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

PRIZES

A prize from the Ordranax Prize Endowment will be awarded to the student of the third, and the student of the fourth year class who has the highest scholastic standing.

UNIVERSITY MEDICAL SOCIETY

The George Washington University Medical Society was established in 1905 by a group of alumni. Its purpose is to cultivate closer friendly relations between the alumni and members of the faculty by means of social gatherings, to advance medical science by the presentation of essays, case reports and specimens for instruction and discussion, at its meetings, and to further the interest of the university in general. All alumni and members of the faculty are eligible for membership on election.

Officers: Dr. F. A. HORNADAY, President, Dr. H. W. KEARNEY, Vice-President, Dr. C. B. CONKLIN, Secretary-Treasurer.

Meets at the Medical School building on the third Saturday of each month from October to May.

Senior students are invited to attend the meetings of this society so allowing them the valuable opportunity of hearing the papers presented on medical subjects and becoming familiar with the conduct of medical societies.

HOSPITAL APPOINTMENTS

Interns are annually appointed in the University Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital; Emergency Hospital; Columbian Hospital for Women; Casualty Hospital; Providence Hospital; Washington Asylum Hospital; Children's Hospital; Episcopal Eye, Ear and Throat Hospital.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION

The central building of this Association is situated within a short distance of the Medical School.

On application through the Dean, students non-resident of the District may become members, with full privileges, including gymnasium, shower baths, swimming pools, lockers, etc., at a special rate of ten dollars for the period of the school session.

Further information regarding the Association may be obtained by application to the Secretary, 1736 G St., N. W.

FEES AND CONTINGENT EXPENSES

Registration fee, payable on entrance.....	\$5.00
Registration fee, each subsequent year.....	2.00
Tuition each year.....	200.00
Breakage deposit, unused part returnable.....	10.00
Graduation fee.....	10.00

The above fees apply to all students who register in this school in any class for the session beginning September 29, 1920, and include the use of microscopes.

Students will be required to pay for injury to microscopes, apparatus and other college property.

All breakage and loss not directly traceable to the individual student is assessed pro rata, and any unforfeited balance will be returned to the student at the expiration of the course.

Persons not candidates for the degree of Doctor of Medicine who take courses in Histology, Embryology, Bacteriology, Pathology or Clinical Microscopy will be charged a fee of \$6.00 for the use of the microscope in each of these courses. Should such a student take more than one of the courses mentioned, in any one school year, he will be charged a single fee of \$6.00 for microscope rental.

Students who elect to take the regular four year course in five years will be required to pay the full tuition for the first four years and will receive the fifth year without additional charge.

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. Registration in the Medical School is for

a period not to exceed one year at a time and acceptance by the School of a student's registration fee does not in any way obligate the School to accept that student for any subsequent year.

Registration, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond of \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Dean.

PREMEDICAL YEARS FEES

SPECIAL COURSE ADMITTING TO THE MEDICAL SCHOOL, BUT NOT LEADING TO A DEGREE IN THE ARTS DEPARTMENT

Annual registration fee.....	\$2
Tuition, per annum.....	180

First Year

Chemistry laboratory	
Materials.....	10
Breakage.....	10
Zoology	
Materials.....	5
Microscope.....	5

Second Year

Zoology	
Materials.....	5
Physics Laboratory	
Materials.....	10

If Chemistry 7 is elected, a \$10.00 fee for materials and a \$10.00 deposit fee will be required.

COURSES LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN MEDICINE

Annual registration fee.....	\$2
Tuition, per annum.....	180

First Year

Chemistry Laboratory	
Materials.....	10
Breakage.....	10

Zoology	
Materials.....	\$ 5
Microscope.....	5
Second Year	
Chemistry Laboratory	
Materials.....	10
Breakage.....	10
Zoology	
Materials.....	5
Physics	
Material fee.....	10

WITHDRAWALS

Withdrawals will be granted only on recommendation of the Dean and the approval of the President.

A certificate of work actually done will be given to any student granted a withdrawal or a transfer to another school during the session. A written request for withdrawal or transfer must be filed with the Dean and no permission to withdraw or transfer, and no certificate of work done will be given a student unless all fees and dues chargeable against him up to the end of the month in which he withdraws have been paid.

BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$30 to \$50 a month.

Applicants are urged to secure from the schools and colleges attended, completely compiled, premedical credentials and forward them for evaluation as long a time as possible before the opening of the Medical School in September.

While no standard form of statement is required, blank forms for enumerating credentials will be supplied if requested.

For catalogues, application blanks, and further information, address

THE DEAN,

Medical School,
The George Washington University,
1335 H Street N. W., Washington, D. C.

THE GEORGE WASHINGTON UNIVERSITY TRAINING SCHOOL FOR NURSES

Administrative and Teaching Personnel

WILLIAM MILLER COLLIER, A.M., LL.D.,.....	<i>President of the University</i>
WILLIAM CLINE BORDEN, M.D.	
<i>Dean, Department of Medicine of the University and Chairman of the Executive Committee of the Hospital</i>	
JOHN WESLEY BOVEE, M.D.....	<i>Gynecology</i>
CHARLES WILLIAMSON RICHARDSON, M.D. }	<i>Ear, Nose and Throat</i>
OSCAR ADDISON MACK McKIMMIE, M.D. }	
HENRY KNOX CRAIG, M.D.....	<i>Materia Medica</i>
RANDOLPH BRYAN CARMICHAEL, M. D.....	<i>Dermatology</i>
CYRUS W. CULVER, M.D.....	<i>Anatomy</i>
OSCAR BENWOOD HUNTER, S.M., M.D.....	<i>Bacteriology</i>
HARRY KNOX CRAIG, M.D.....	<i>Physiology</i>
EDGAR PASQUAL COPELAND, M.D.....	<i>Pediatrics</i>
DANIEL LERAY BORDEN, A.M., M.D.....	<i>Surgery</i>
HURON W. LAWSON, M.D.....	<i>Obstetrics</i>
THOMAS LINVILLE, M.D.....	<i>Medicine</i>
C. B. CONKLIN, M.D.....	<i>Contagious Diseases</i>
TRUMAN ABBE, A.B., M.D.....	<i>Bandaging</i>
FRANK A. HORNADAY, M.D.....	<i>Public Sanitation</i>
CUSTIS L. HALL, M.D.....	<i>Orthopedics</i>
WILLIAM T. DAVIS, M.D.....	<i>Eye</i>
JOHN B. COPPING.....	<i>Superintendent</i>
OLIVE B. SWEET, R.N.....	<i>Superintendent of Nurses</i>
IRENE HANSON, R.N.....	<i>Asst. Superintendent of Nurses</i>
HELEN I. PFAFF, R.N.....	<i>Instructor</i>
MARION B. OLDS, R.N.....	<i>Night Supervisor</i>
RUTH WEIR, R.N.....	<i>Operating Room Supervisor</i>
AURALEE SIGAFOOSE, R.N.....	<i>Anaesthetist</i>
LOUISE STRATBUCKER.....	<i>Dietitian</i>
PAUL SYLVESTER, Reg. Phar.....	<i>Solutions</i>
CAROLYNE McKIM CHAPMAN, R.N.....	<i>Instructor in Massage</i>
CLARA MOONEY, MRS.....	<i>Matron, Nurses' Home</i>

HOSPITAL.

The George Washington University Hospital is a general hospital located in the central part of the city, and connected with it is a Dispensary having a large out-patient service, so that the Institution affords a thorough and practical experience in medical, surgical, gynecological, obstetrical and emergency nursing and the administration work incident to a hospital.

The staff of the George Washington University Hospital are all members of the Faculty of Medicine of the University Medical School and the nurses receive the benefit arising from instruction and nursing cases under these trained instructors.

ADVANTAGES

Nurses in training in this Institution have the unusual advantages incident to University association, are carried as students in the University and as such participate in the commencement exercises.

The city of Washington being the Capital of the United States is especially attractive as a place of residence during the educational period of a young woman's life. There are more schools for young women in the city than in any other of its size in this country.

The cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place in which to pass three years of study.

NURSES' HOME

The Nurses' Home with a resident matron is located at 1016 13th Street N. W., a short distance from the Hospital, and furnishes the nurses excellent and adequate accommodations.

BOARD OF LADY MANAGERS

Since the establishing of the Hospital and Training School for Nurses, both these institutions have been very materially assisted by a most efficient Board of Lady Managers. This Board has worked most energetically in the interest of both the Hospital and Training School, and by personal endeavor and financial assistance have done much to improve these institutions.

REQUIREMENTS FOR ADMISSION

Candidates must apply personally or by letter to the Superintendent of Nurses upon blank forms provided therefor. Applicants must not be less than 19 nor over 30 years of age. They must be in good physical condition and present satisfactory evidence of their preliminary educational qualifications. Graduation from a grammar school and three years' work in a high school or academy or its equivalent are necessary. Approved applicants will be taken for a probationary period of four months as vacancies may occur. Such probationers as are deemed fitted for the duties of nurses, at the expiration of their probationary period, upon subscribing to the requirements of the school, will be accepted as pupil nurses.

Classes for probationers begin in January, April, July and October.

COURSE OF TRAINING

The course of training (including the probationary period) covers three years and comprises theoretical and practical instruction. By affiliation, pupils are given four months in eye, ear, nose and throat work at the Episcopal Hospital and three months in Children's diseases, at The Children's Hospital, both in this city.

ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Anatomy and Physiology	Communicable diseases	Diet and diseases
Bandaging	Pediatrics	Nervous and Mental
Chemistry	Gynecology	diseases
Bacteriology	Orthopedics	Special Senses
Dietetics	Massage	Skin and Venereal diseases
Drugs and Solutions	Obstetrics	Special lectures
Materia Medica	Pathology and Urin-	and Training School
Ethics	analysis	Administration.
Hygiene	Nursing Ethics and	
Medical diseases	History of Nursing.	
Surgical diseases		
Nursing technic		
Physical education.		

(5) Diet cooking for the sick including (a) twelve lessons in cooking with a competent diet teacher; (b) food values, and feeding in special cases, to be taught in classes and not in lectures.

(6) A thorough course of theoretical instruction in contagious nursing where practical experience is impossible.

(7) Bacteriology.

REGULATIONS

I. Probationers, when admitted to the school, will require the following outfit: *Uniform.* 4 uniform dresses, 12 uniform aprons, 1 dozen pairs uniform cuffs, 1 dozen uniform collars, 3 striped underskirts, 2 laundry bags, 1 watch with second hand, 6 sets plain underclothing, raincoat, 1 pair rubbers, shoes with rubber heels, 1 kimono.

II. To insure uniformity and economy the uniform sample must be secured through the Superintendent of Nurses, and no nurse will be allowed to go on duty until her outfit has been inspected and found to comply with the requirements of the school.

III. All articles of clothing must be plainly made and marked with name in full.

IV. Jewelry is not allowed to be worn on duty, and if of any value is best left at home. If brought, it will be at the risk of the owner. Watches are to be worn on tape around neck, under bib.

V. Two hours, are allowed every week day, for rest, study and recreation, also one-half day after 1 p. m. each week, and one-half day on Sunday.

VI. A vacation of two weeks is allowed each year.

VII. A pupil nurse may be dismissed at any time if there is sufficient cause for such action, but no dismissal shall be made without the approval of the President of the University.

REMUNERATION

Each nurse in training receives professional instruction, home, board, laundry and medical care free and a salary of \$12 per month (including the probation period) and an additional \$108 (\$3.00 per month) paid at the expiration of the three years course.

DIRECTORY FOR NURSES

A general directory for Graduate Trained Nurses was established in connection with the Training School and Hospital during the first year in which the School was in operation. The object of this directory is to afford a means to physicians and patients of securing with the least loss of time, the services of nurses who have graduated from our Training School. The Directory is under the supervision of the Executive Committee of the Faculty of Medicine and under the direct charge of the Superintendent of Nurses.

GRADUATES

JUNE, 1919, COMMENCEMENT

Willie Grant Ashby.....	Virginia
Sarah Elizabeth Brown.....	District of Columbia
Ruth Edward Crews.....	North Carolina
Mary Jane Flaherty.....	Virginia
Elizabeth McEl. Murray Fulcher.....	Georgia
Lena Moore Graves.....	Virginia
Nell Hamlin.....	North Carolina
Laurel Hayden.....	Maryland
Virginia Kirby.....	Virginia
Grace Lake.....	Virginia
Louva Lee Neff.....	Virginia
Marion Bovee Olds.....	Virginia
Lurline Vernon Palmore.....	Virginia
Lola Spratt.....	Virginia
Bessie Jeffrey Walker.....	Virginia
Elsie Watson.....	North Carolina
Grace Leonainie Wells.....	Virginia

**GEORGE WASHINGTON UNIVERSITY
SCHOOL OF PHARMACY**

WILLIAM MILLER COLLIER, LL. D. PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M. D., PHAR. D.,
Dean of the School of Pharmacy, Professor of Pharmacy

OFFICERS OF THE NATIONAL COLLEGE OF PHARMACY

WILLIAM MILLER COLLIER, LL. D. PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M. D., PHAR. D., . . . Dean and Chairman of the College
LEWIS FLEMER, PHAR. D. Vice-Chairman of the College
CHARLES B. CAMPBELL, PHAR. D., M. D. Secretary of the College
HERBERT C. EASTERDAY, PHAR. D. Treasurer of the College

BOARD OF TRUSTEES

(with year of expiration of term of office)

HENRY E. KALUSOWSKI, 1921	LEWIS FLEMER, 1920
SAMUEL L. HILTON, 1921	WILLARD S. RICHARDSON, 1920
WILLIAM T. KERFOOT, JR., 1921	WYMOND H. BRADBURY, 1922
HENRY B. FLOYD, 1921	LYMAN F. KEBLER, 1922
CHARLES B. CAMPBELL, 1920	FRED B. CAMPBELL, 1922
HERBERT C. EASTERDAY, 1920	FRANK P. WELLER, 1922

MEMBERS OF THE COLLEGE

PHILIP J. AFFLECK	R. CLIFFORD HINES
WALTER ARMSTRONG	FLORENCE V. HOSKINS
THOMAS H. ATKINSON	JAMES T. HOSKINS
ALFRED BLUMBERG	WILLIAM S. JONES
ROBERT F. BOGGAN	HENRY E. KALUSOWSKI
W. EDWARD BOYD	LYMAN F. KELBER
HOWARD M. BRADBURY	WILLIAM T. KERFOOT, JR.
WYMOND H. BRADBURY	WILLIAM H. MCCLURE
LOUIS F. BRADLEY	D. J. MATTINGLY
ALFRED T. BRONAUGH	WILLIAM F. MATTINGLY
V. ALOIS BURGHER	REDMOND MAYO
HOMER K. BUTLER	T. K. NELSON
CHARLES B. CAMPBELL	ROBERT J. MYERS
FRED B. CAMPBELL	GUY M. NEELY
JOSEPH D. COBLENTZ	THOMAS E. OGRAM
ALBERT N. CONNOR	NORMAN D. PARKER
FRANCIS M. CRISWELL	PAUL PEARSON
WILLIAM C. DOWNEY	MORRIS A. POZEN
ROGER W. DUFFEY	R. LUCIEN QUIGLEY
PETER J. DUNCAN	ALBERT M. READ (honorary)
HERBERT C. EASTERDAY	CHARLES C. READ
HENRY EVANS	EARLE K. RICHARDSON
W. ASHTON EVANS	FRANK R. RICHARDSON
MARTIN S. FEALY	WILLARD S. RICHARDSON
LEWIS FLEMER	FRANK ASHBY ROBEY
HENRY LEWIS FLEMER	BERT H. SMYSER
GEORGE R. FLEMER	SAMUEL T. STOTT
HENRY B. FLOYD	AUGUSTUS C. TAYLOR
LEOPOLD H. FORSTER	FRANK B. TIPTON
CHARLES J. FUHRMANN	F. A. TSCHIFFELY
MALCOLM G. GIBBS	ROBERT A. VEITCH
CHARLES E. GROSS	S. M. WAGNER
ROBERT N. HARPER	CHARLES S. WALTER
CHARLES HAWKINS	CONRAD H. WEISS
FRANK C. HENRY	FRANK P. WELLER
WILLIAM P. HERBST	EDWARD W. WHITESIDE
WALTER R. HILL	HARVEY W. WILEY (honorary)
SAMUEL L. HILTON	

SUBJECTS OF INSTRUCTION

<i>Subject.</i>	<i>Year.</i>
Pharmacy.....	First, second, third, and fourth year.
Chemistry.....	First, second, third, and fourth year.
English.	
French.	} Elect one..... First year.
German.	
Spanish.	
Zoology.....	First year.
Psychology and Logic.....	First year.
Physics.....	First year.
Botany.....	Second year.
Physiology.....	Second year.
Materia Medica.....	Third year.
Pharmacology.....	Third year.
Pharmacognosy.....	Second year.
Bacteriology.....	Third year.
Clinical Microscopy.....	Third year.
Public Health and Hygiene.....	Fourth year.
Mercantile Pharmacy.....	Fourth year.

GENERAL STATEMENT

The forty-ninth annual session of the George Washington School of Pharmacy will commence Wednesday, September 29, 1920.

The course of instruction covers four scholastic years of thirty-two weeks, leading to the degree of Bachelor of Science in Pharmacy.

The entrance requirements and class instruction are on the same basis as required of other schools in the University.

All work offered in the School of Pharmacy meets the highest requirements of pharmaceutical instruction, its aim is to train pharmacists so as to enable them to intelligently and efficiently perform any work that may be required from a pharmacist with scientific training, the equipment, methods of instruction and courses are arranged to attain the object of its aim, the close association of the College of Pharmacy with the George Washington University by which students in pharmacy share all the advantages and enjoy the spirit of a great educational establishment is in itself an incentive to prepare themselves to meet the requirements of the trend of pharmaceutical education.

Instruction will be given during the day.

The degree of Bachelor of Science of Pharmacy will be conferred on students who have attended the required course of instruction and pass satisfactory examinations in the same.

CLASSIFICATION AND ADVANCEMENT OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

Proficiency in all subjects is marked on a scale of 100. The passing grade in each subject is 75.

Examinations are held at the end of the course in each subject. Students who fail to appear at a regular examination will not be examined until the next regular examination except by special permission of the Advisory Committee of the Faculty. For special examinations, a fee of \$5 will be charged for each subject.

To be *advanced*, a student must not fail in more than one major or two minor subjects. It is recommended that students advanced conditioned remove their conditions in the September examinations. Students advanced conditioned must remove all such conditions before they can be again advanced.

Students who fail in more than one major or two minor subjects, will not be given re-examinations in the September examinations except by special permission of the Advisory Committee of the Faculty.

Students who fail of graduation because of deficiency in but one major or two minors, if approved by the Advisory Committee of the Faculty, may be re-examined in the September examinations for graduation. Students who are allowed this privilege, will be required to take such examinations as the Advisory Committee may direct.

Students who fail of advancement or graduation will be required to repeat a year, taking such subjects as may be directed by the Advisory Committee of the Faculty.

Students who fail of advancement after repeating any one of the first three years or who fail of graduation after repeating the final year, will not be permitted to maintain their connection with the school.

REQUIREMENTS FOR GRADUATION

Every candidate for the degree of Bachelor of Science in Pharmacy must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of 32 weeks each in four separate years; must have satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction."

If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

TEXTBOOKS.

The following textbooks are used in the courses in Pharmacy: U. S. Pharmacopœia; Practice of Pharmacy, Remington; Treatise on Pharmacy, Caspary.

STUDENT ACTIVITIES

Student Activities in the University are carried on under the direction of a Board of Managers, acting under resolutions adopted by the Board of Trustees. Student Activities, including athletics, debating, and the various student publications, are supported by a voluntary tax to which all students in the University are invited to subscribe. This tax not only admits the subscriber to athletic contests and entitles him to copies of the publications, but also provides for free medical attention and hospital service under certain conditions. This tax is payable like other University fees, at the office of the Treasurer of the University.

FEES AND CONTINGENT EXPENSES

Registration fee, payable on entrance.....	\$5
Registration fee, each subsequent year.....	2
Tuition each year.....	180
Graduation fee.....	10
Material fee for Chemistry.....	10
Material fee for Physics.....	10
Materials and Microscope for Zoology.....	10
Materials and breakage for Pharmacy.....	10

This includes all laboratory fees and charges for material used in Chemistry and practical Pharmacy. Students will, however, be required to pay all charges for injury to microscopes, apparatus and other college property.

All breakage and loss not directly traceable to the individual student is assessed pro rata, and any unforfeited balance will be returned to the student at the expiration of the course.

Persons not candidates for the degree of Bachelor of Science in Pharmacy who take courses in Bacteriology or Clinical Microscopy will be charged a fee of \$6 for the use of the microscope in each of these courses. Should such a student take more than one of the courses mentioned, in any one school year, he will be charged a single fee of \$6 for microscope rental.

Students who elect to take the regular four year course in five years will be required to pay the full tuition for the first four years and will receive the fifth year without additional charge.

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. Registration in the Pharmacy School is for a period not to exceed one year at a time and acceptance by the School of a student's registration fee does not in any way obligate the School to accept that student for any subsequent year.

Registration, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond of \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Treasurer.

WITHDRAWALS

Withdrawals will be granted only on recommendation of the Dean and the approval of the President.

A certificate of work actually done will be given to any student granted a withdrawal or a transfer to another school during the session. A written request for withdrawal or transfer must be filed with the Dean and no permission to withdraw or transfer, and no certificate of work done will be given a student unless all fees and dues chargeable against him up to the end of the month in which he withdraws have been paid.

BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from \$30 to \$50 a month.

For catalogues, application blanks, and further information, address—

THE DEAN,

School of Pharmacy,

The George Washington University,

808 Eye Street N. W., Washington, D. C.

LAW SCHOOL

FACULTY

WILLIAM MILLER COLLIER, A.M., LL.D.....	<i>President of the University</i>
MERTON LEROY FERSON, A.M., LL.B.....	<i>Dean and Professor of Law</i>
WALTER COLLINS CLEPHANE, LL.M.....	<i>Professor of Law</i>
EDWIN CHARLES BRANDENBURG, LL.M.....	<i>Professor of Law</i>
ARTHUR PETER, LL.B.....	<i>Professor of Law</i>
JOHN PAUL EARNEST, A.M., LL.M.....	<i>Professor of Law</i>
WENDELL PHILLIPS STAFFORD, A.M., LL.D., Litt.D....	<i>Professor of Law</i>
JOHN WILMER LATIMER, LL.B.....	<i>Professor of Law</i>
WILLIAM CABELL VAN VLECK, A.B., LL.B.	<i>Secretary and Professor of Law</i>
*ARCHIBALD KING, A.M., LL.B.....	<i>Assistant Professor of Law</i>
CHARLES SAGER COLLIER, A.B., LL.B.....	<i>Assistant Professor of Law</i>
MERRILL ISAAC SCHNEBLY, A.B., J.D.....	<i>Assistant Professor of Law</i>
JOHN MONTEITH MCFALL, A.M., LL.B.....	<i>Assistant Professor of Law</i>
LOYD HALL SUTTON, S.B., LL.B.....	<i>Associate Professor of Patent Law</i>
JOHN HANNA, A.M., LL.B.....	<i>Lecturer in Law</i>
CHESTER McLAIN, A.B., LL.B., S.J.D.....	<i>Lecturer in Law</i>
WILLIAM HENRY STAYTON, LL.M.....	<i>Lecturer in Law</i>
LEVI RUSSELL ALDEN, A.M., LL.B.....	<i>Lecturer in Law</i>
FRED C. O'CONNELL, LL.M.....	<i>Clerk of the Moot Court</i>

MOOT COURT OF APPEALS

HENRY BROWN FLOYD MACFARLAND.....	<i>Chief Justice</i>
STANTON JUDKINS PEELE, LL.B.....	<i>Associate Justice</i>
BRAINARD WARNER PARKER, LL.B.....	<i>Associate Justice</i>

LIBRARY

ARTHUR VAN METER, A.B.....	<i>Assistant Librarian</i>
JOSEPH EAGLESON McCULLOUGH.....	<i>Assistant Librarian</i>

GENERAL STATEMENT

History.—The Law School, established in 1865, is the oldest in the city of Washington. Its course of instruction for the degree of Bachelor of Laws, originally requiring two years, was increased in 1898 to three years. A year of graduate work was added in 1877 leading to the degree of Master of Laws. The curriculum has since been increased by a course of study leading to the degree of Master of Patent Law.

*On leave of absence 1919-20. An officer in the American Expeditionary Forces in France.

Member of Association of American Law Schools.—The Law School was one of the group of law schools which in 1900 organized the Association of American Law Schools and it has remained a member of the Association since that time. This Association includes forty-eight of the most progressive law schools of the country and is committed to the policy of advancement in legal education. As this school maintains the standards of the Association, work certified by it is given a maximum of credit by other law schools of the country. This enables students who are unable to complete their studies in Washington to continue them at other institutions with a minimum loss of time and work.

Purpose of Course.—The School aims to give a thorough legal training to students whose education and maturity fit them to pursue serious professional study. Nearly sixty per cent of its students have had college training and their average age is over twenty-five years. A preliminary course in liberal arts is encouraged and the University permits the first year of law work to be counted as the fourth year of college work for the degree of Bachelor of Arts, thus enabling students to obtain both the academic and professional degrees in six years.

Method of Instruction.—The method of instruction followed is designed to instill correct modes of legal study, to train the mind in legal reasoning, and to give a thorough grasp of fundamental legal principles. The student studies leading cases—the earlier cases which establish a principle, the later cases which show its qualifications. This study is supplemented by classroom discussion and instruction. Thus while the student is being trained to analyze and to discriminate, he at the same time masters the principles of law, sees the reasons on which they are based, and observes the influence on their development of successive political, economic, and social theories. The method is most practical. The student has always before him actual problems and their solution by the ablest judges of England and America. He begins under his teacher's guidance the work he must do when he enters practice. In no other way can the future lawyer acquire such power to solve the new problems arising from the rapidly changing social and economic conditions of life.

"The only way to clarify and simplify our law as a whole is to reach the lawyer in the making and mold his habits of thought by adequate instruction and training so that when he comes to the Bar he will have learned to think not merely in terms of law but in terms of jurisprudence. The living principle of the case system of instruction in our law schools is that the student is required by a truly scientific method of induction to extract the principle from the decision and to continually state and restate for himself a system of law evolved from its history. He is thus preparing not merely to accept formally dogmatic statements of principles but to receive

and assimilate and make his own the systematic thought and learning of the world in the science of jurisprudence. With a Bar subjected generally to that process of instruction, the more general systematic study of jurisprudence would follow naturally and inevitably, and the influence of that study would be universal; and from that condition would evolve naturally the systematic restatement of our law, by men equal to that great work."^{*}

This inductive case system is the antithesis of the lecture and illustrative case method which is often mistaken for it. The case method is now used in over eighty per cent of the schools in the Association of American Law Schools.

The substantive law is taught almost wholly by professional teachers employing the case method and giving all their time to the school; the practice courses are conducted by lawyers and judges in active practice.

Scope of Course.—The course of study is not local in its scope but constitutes a thorough preparation for the practice of law in any English speaking jurisdiction. It satisfies the professional study required for admission to the Bar examinations of the District of Columbia and all other jurisdictions of the United States. The school has conferred over 2,500 degrees, and its graduates are now practicing in every state of the Union.

ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW

The city of Washington has unusual attractions for students and particularly for students of law. It lies between the North and the South. It is a residential city of rare beauty, and its population is drawn from all over the United States. The library facilities of the city, both general and legal, are unexcelled. It is unique in the extent of its legal machinery. It is the seat of Congress, the Supreme Court of the United States, the Department of Justice, the United States Court of Claims, the United States Court of Customs Appeals, and of the District of Columbia Court of Appeals, Supreme Court, and Municipal Courts, which exercise the dual function of state and federal courts. By attending the sessions of these various bodies students can familiarize themselves with all branches of legal procedure and keep in touch with current legal thought while pursuing their studies.

LOCATION

The Law School occupies the entire fifth and sixth floors of the New Masonic Temple, corner of New York Avenue, Thirteenth, and H Streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious class rooms, moot court rooms, offices, the law library, and a students' room.[†]

^{*}From the address of Hon. Elihu Root, President of the American Bar Association August, 1916.

[†]Beginning September 1, 1920, The Law will occupy its new Building at 1435 K Street Northwest.

LIBRARY

A well-equipped working library comprising more than 10,000 volumes is open to students from 8.30 a. m. to 10 p. m. Competent librarians are in charge and will give students assistance in the use of books.

The library contains the complete decisions of the highest courts of forty-eight states and the District of Columbia, the complete reports of the United States Supreme Court and the other federal courts, the complete National Reporter Reports, the Century, Decennial, Key number and United States Supreme Court Digests, the various encyclopedias of law, the Lawyers Reports Annotated, the American Decisions, American Reports and American State Reports, the English Common Law and Chancery Reports, the English Reprint, the English Law Reports and Law Journal Reports since 1865, and about 800 standard text books and legal periodicals.

In addition to these facilities the students have free access to the Congressional Library and other public libraries.

ACADEMIC YEAR AND REGISTRATION

The academic year 1920-21 begins Wednesday, September 29, closes Wednesday, June 8. The year is divided into two half-years, the second beginning February 7. The course is so arranged that a student may enter the second half-year and be graduated three years from that time, receiving his degree at the Winter Convocation held on or about February 22 of each year.

Students are urged to register at the beginning of the half-year. Those who register later than three weeks after the opening of the half-year will be restricted to registration for such work only as in the opinion of the faculty they can successfully carry.

HOURS OF INSTRUCTION

The hours of instruction are 7.50-8.40 a. m., 9.00 a. m.-12.00 m., and 5.10-6.50 p. m. Many of the courses are duplicated, so that a student may, if he so desires, confine his work largely either to the forenoon or to the afternoon. Students who desire, or are compelled by circumstances, to support themselves by employment in the Government Service or elsewhere, or who desire to obtain practical experience in an attorney's office in addition to their work in law school, will find this arrangement of hours especially desirable. Such students may complete the full course for the degree, confining their attendance entirely from 5.10-6.50 p. m., or attending partly from 7.50-8.40 a. m., and partly from 5.10-6.50 p. m.

ADMISSION

Both men and women are admitted to the Law School.

1. *For the Degree of Bachelor of Laws.*—The requirements for admission to the course leading to the degree of Bachelor of Laws may be satisfied in either of the following ways:

a. By the presentation of a diploma or certificate of graduation from the classical, scientific, or equivalent course of a college or university.

b. By the presentation of certificates from a college or university, or from an approved high school or preparatory school, showing the successful completion of at least fifteen high school units, which are broadly equivalent to a four year high school course. A unit represents approximately one year of study of a major subject in a high school. Applicants qualifying for admission under this requirement must be at least eighteen years of age. Those presenting high school credits only should have them certified on the blank forms which they may obtain from the Secretary of the Law School.

The fifteen units may be made up from the following subjects: (The Roman numerals indicate the year of study in the subject).

<i>Subjects</i>	<i>Units</i>
English I, II, III, IV.....	4
Latin, Elementary, I, II.....	2
Advanced, III, IV.....	2
Greek, Elementary, I, II.....	2
Advanced, III.....	1
French, Elementary, I, II.....	2
Advanced, III, IV.....	2
German, Elementary, I, II.....	2
Advanced, III, IV.....	2
Spanish, Elementary, I, II.....	2
History, Ancient.....	1
Mediaeval and Modern European.....	1
English.....	1
American.....	1
Mathematics	
Algebra, Elementary and Intermediate.....	1½
Advanced.....	½
Geometry, Plane.....	1
Solid.....	½
Plane Trigonometry.....	½
Science	
Physics.....	1
Chemistry.....	1
Physiography.....	1
Biology.....	1
Botany.....	½
Zoology.....	½
Political Economy.....	½
Civil Government.....	½

Commercial High School Subjects

Accounting and Finance.....	1
Bookkeeping.....	1
Business Organization.....	1
Commercial Law.....	1
Commercial History.....	1
Commercial Geography.....	1
Government and Industrial Problems.....	1

II. *For the Degree of Master of Laws or Master of Patent Law.*—Candidates for these degrees must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools.

III. *As Special Students.*—Persons who can not qualify as candidates for a degree but are over twenty-one years of age and have had such educational training and practical experience as should enable them to pursue satisfactorily the study of law, may be admitted as special students by consent of the Dean.

ADVANCED STANDING

Students from other law schools which substantially comply with the requirements of the Association of American Law Schools will receive equivalent credit, not exceeding two years' work. Such students must have been qualified to enter this school when they began the study of law. The right is reserved to refuse such credit, in whole or part, save conditionally or after examination, and credit given may be withdrawn for poor work.

Applicants of whom examination may be required, can take the regular examinations or those held at the beginning of each academic year. (See examinations.)

No credit will be given for studies pursued in a college or high school before entering on the regular study of law, or in a law office.

SUBJECTS OF INSTRUCTION

The course of instruction extends through a period of at least three years. For the degree of Bachelor of Laws twelve hours class work a week are necessary to complete the course in three years. Ten hours a week for a year in subjects not counted towards the Bachelor's degree, are required for the degree of Master of Laws or Master of Patent Law.

The subjects marked with an asterisk are prescribed for the degree of Bachelor of Laws. The student may elect the remainder of his subjects. Third-year students may elect subjects of the second year not previously studied. The selection of the subjects must be made in all cases within ten days after the beginning of the half-year.

Students devoting their whole time to the study of law may, with the permission of the Dean, take work not exceeding fifteen hours a week. Excess credits may be applied toward the degree of Master of Laws or

Master of Patent Law. Students with substantial outside employment may not register for more than twelve hours and are urged to carry less, and to devote more than three years to the course.

FIRST YEAR SUBJECTS

*COMMON LAW ACTIONS. *Two hours first half year.* Introductory to study of law. Substantive and adjective law; courts; steps in an action; original writ; scope of formed actions; growth of new actions; development of law. *Sunderland's Cases on Common Law Pleading.* MR. COLLIER.

*CONTRACTS. *Three hours.* Simple contracts; offer, duration and termination thereof; acceptance; consideration; contracts under seal, including thereunder formalities of execution, delivery and consideration; parties affected by contracts: beneficiaries; assignees; joint obligors and obligees; performance of contracts: express and implied conditions; impossibility. *Williston's Cases on Contracts.* MR. FERSON.

CRIMINAL LAW AND PROCEDURE. *Three hours second half year.* Sources of the criminal law; intent and act; attempts; insanity as a defense; historical development of crimes and statutory changes. The arrest; bail; the grand jury; the indictment; trial; pleas; modification of early practice, and statutory changes. *Mikell's Cases on Criminal Law and Procedure.* MR. EARNEST.

*EQUITY I. *Two hours second half year.* The nature and underlying principles of equity; specific performance of affirmative and negative contracts; relief for and against third persons under contracts, especially under contracts relating to the use of land. *Ames' Cases on Equity Jurisdiction, Volume I.* MR. McFALL.

*PERSONAL PROPERTY. *Two hours first half year.* Distinction between personal and real property; nature of and rights based upon possession; some methods of acquiring title to chattels; liens and pledges; conversion. *Warren's Cases on Property.* MR. SCHNEBLY.

PRINCIPLES OF LEGAL LIABILITY. *Two hours first half year.* Nature of an act; causation of injury; proximity or remoteness of injury as affecting tort or criminal liability of the actor; effect of interposition of other causes including natural forces and acts of animals and human beings; excuses for acts causing injury including duty, public authority, defence of person and property and consent of injured person. *Beale's Cases on Legal Liability.* MR. McFALL.

*REAL PROPERTY I. *Two hours second half year.* Feudal tenure and incidents; estates in land; co-tenancy; future interests; seisin; creating and transferring estates; uses; incidents of ownership. *Warren's Cases on Property.* MR. SCHNEBLY.

*Prescribed Subjects.

***TORTS.** *Three hours first half, two hours second half year.* Negligence; duty of care of occupant of land toward those coming on it; trespass to the person, to real and personal property; contributory negligence; liability for fire or explosives; liability of owner of animals; deceit; libel and slander; malicious prosecution; unfair competition; strikes and lock-outs. *Pound's Cases on Torts.* Mr. VAN VLECK.

SECOND YEAR SUBJECTS

AGENCY. *Two hours.* Requisites for creation of the agency relation; power of the agent to subject the principal to tort, criminal and contract liability to third persons; responsibility of the agent to third persons; liabilities in case of undisclosed principal; duties of principal and agent inter se; delegation of powers by the agent; ratification; termination of agency. *Wambaugh's Cases on Agency.* Mr. FERSON.

***BILLS AND NOTES.** *Three hours second half year.* Form and essential requisites of negotiable instruments; delivery; indorsement; liability of maker, acceptor, drawer, indorser, and of person transferring by delivery. *Colson's Huffcut's Cases on Negotiable Instruments.* Mr. McFALL.

***COMMON LAW PLEADING.** *Two hours first half year.* The declaration, necessary allegations, separate counts, joinder of causes; pleas, the common traverse, the special traverse, the general issues, confession and avoidance, estoppel, abatement; replications; amendment, aider and replender. *Stephen on Pleading.* Mr. CLEPHANE.

DOMESTIC RELATIONS. *Two hours first half year.* Marriage, divorce and separation; personal and property rights and liabilities of husband and wife; parent and child; infancy. *Woodruff's Cases on Domestic Relations (2d ed.).* Mr. HANNA.

***EQUITY II.** *Two hours first half year.* A continuation of the study of the rules regulating specific performance of contracts including the doctrine of equitable conversion, and the more important defenses to a specific performance such as the statute of frauds, fraud, hardship, misrepresentation and concealment. *Ames' Cases on Equity Jurisdiction, Volume I.* Mr. McFALL.

EQUITY III. *Two hours second half year.* Bills of interpleader; bills of peace; bills Quia Timet; cloud on title; reformation and rescission; mistake of law and mistake of fact. *Ames' Cases on Equity Jurisdiction, Volume II.* JUSTICE STAFFORD.

EQUITY PLEADING AND PRACTICE. *One hour first half year.* Parties; process; bills; demurrers; answers; pleas; disclaimers; cross-bills; replications; amendments; practice; injunctions; receivers. *Jones on Equity Pleading and Practice.* Mr. CLEPHANE.

*Prescribed Subjects.

*EVIDENCE. *Three hours first half year.* Judicial notice; burden of proof and presumptions; admissions and confessions; character; opinion evidence; the hearsay rule and its exceptions; the privileges and disqualifications of witnesses; the examination of witnesses; writings. *McKelvey on Evidence, Thayer's Cases on Evidence.* Mr. PETER.

INSURANCE. *Two hours second half year.* Marine, fire and life insurance; validity of the policy as affected by insurable interest; concealment; representation; warranty and other matters; rights of the insured and of the insurer under the policy; rights of assignees and beneficiaries. *Wambaugh's Cases on Insurance.* Mr. McFALL.

QUASI-CONTRACTS. *Three hours second half year.* Obligations imposed by law which are enforceable by action of assumpsit. *Thurston's Cases on Quasi-Contracts.* Mr. VAN VLECK.

*REAL PROPERTY II. *Two hours.* Rights in another's land; profits, easements, licenses, covenants running with the land; acquisition of real estate inter vivos; accretion, adverse possession, prescription, conveying, covenants for title, estoppel by deed; dedication. *Warren's Cases on Property and Gray's Cases on Property (2d ed.), Volume III.* Mr. SCHNEBLY.

SALES. *Three hours second half year.* Subject matter of a sale of personal property; the passing of title as affected by the goods being specified or unspecified, the contract being executed or executory, the use of documents of title, and shipments c. o. d.; effect of fraud and of retention of possession; rights and remedies of the seller; rights and remedies of the buyer. *Williston's Cases on Sales (2d ed.).* Mr. COLLIER.

THIRD YEAR SUBJECTS

ADMIRALTY. *Two hours second half year.* Jurisdiction; admiralty liens; bottomry and respondentia; salvage; general average; charter parties and contracts of affreightment; marine insurance; The Harter Act; The Limited Liability Act; marine documents; procedure in admiralty. *Ames' Cases on Admiralty Jurisdiction.* Mr. STATTON and Mr. ALDEN.

BANKRUPTCY. *Two hours second half year.* History of the law; jurisdiction and procedure in Courts of Bankruptcy and before Referees; effect upon civil litigation of bankruptcy proceedings; voidable preferences; jurisdiction over appeals, etc. Mr. BRANDENBURG.

CONFLICT OF LAWS. *Two hours.* Jurisdiction; of law over persons and things; of courts, in rem, in personam, quasi in rem, and for divorce, creation and enforcement of foreign rights; limitations and enforcement of such rights; remedies, including rights of action and procedure; par-

*Prescribed Subjects.

ticular classes of rights, including personal rights, property rights, tort rights, contract rights; administration of estates. *Lorenzen's Cases on Conflict of Laws*. Mr. VAN VLECK.

CONSTITUTIONAL LAW. *Two hours*. Legislative, executive and judicial powers; the relation of nation and states; District of Columbia and territories; the contract clause; ex post facto laws; fourteenth amendment; commerce clause, etc. *Wambaugh's Cases on Constitutional Law*. Mr. COLLIER.

*CORPORATIONS. *Two hours*. The course aims to deal with all general principles of corporation law including the corporation's relations with the state, its promoters, its stockholders, and its creditors, and the rights and obligations arising therefrom. *Warren's Cases on Corporations* (2d ed.). Mr. COLLIER.

FEDERAL PROCEDURE. *Two hours first half year*. Source of Federal jurisdiction; the law as administered by Federal Courts; jurisdiction and procedure; appellate jurisdiction of Circuit Court of Appeals and Supreme Court of the United States; practice in Court of Claims, and other Federal Courts. Mr. BRANDENBURG.

LEGAL BIBLIOGRAPHY AND BRIEF MAKING. *One hour first half year*. Where and how to find the law; how to use decisions and statutes; trial brief; appeal brief. Judge LATIMER.

LEGAL TACTICS AND ETHICS. *One hour second half year*. Duties of attorneys; ethics; office practice; common law practice; summary judgments; attachments; examination of witnesses; appellate practice; extraordinary legal remedies. Mr. CLEPHANE.

*MOOT COURT. *Two hours*. Pleadings; trials before judge; trials before jury; extraordinary remedies; appellate work. There are three nisi prius courts, Equity, Circuit, and Criminal, and a Court of Appeals. The proceedings are conducted as in a regular court. Statements of fact are furnished the students who must determine the court in which to sue, frame their pleadings, and conduct the cases to a conclusion in accordance with the rules of actual practice. Messrs CLEPHANE AND EARNEST AND Judge LATIMER.

ORGANIZATION AND MANAGEMENT OF CORPORATIONS. *One hour second half year*. Promotion; selecting domicile; capitalization; charter; by-laws; meetings; stockholders; directors; officers; stock; bonds; voting trusts. *Clephane on the Organization and Management of Corporations*. Mr. CLEPHANE.

PARTNERSHIP. *Two hours first half year*. Formation; title to partnership property; partnership liability; rights and duties of partners inter se; rights and remedies of creditors. *Ames' Cases on Partnership*. Justice STAFFORD.

*Prescribed Subjects.

PATENT LAW (SUBSTANTIVE) AND PATENT OFFICE PRACTICE. *Two hours.* Substantive Patent Law; Subjects of patents; invention; anticipation; statutory bars; utility; parties; reissues; disclaimers; extent of monopoly; state and federal regulation; transfers of title; licenses; construing claims; infringement. Patent Office Practice; Attorneys; application papers; examinations; amendments; division; double patenting; interferences; interference practice; appeals; abandonment; renewals; public use proceedings; issue. Mr. SUTTON.

PATENT LAW PRACTICE. *Second half year.* Trial of patent law cases in moot court. Mr. SUTTON.

PREPARATION OF LEGAL INSTRUMENTS. *One hour second half year.* Contracts; deeds; acknowledgement and proof of deeds; mortgages and deeds of trust; leases; bills of sale; chattel mortgages; release of mortgages or deeds of trust; powers of attorney; assignments; wills. Judge LATIMER.

†**PUBLIC SERVICE COMPANIES AND THE INTERSTATE COMMERCE ACT.** *Two hours.* An introductory consideration of the rights, liabilities and duties of public service companies in general, followed by a more minute study of the duties and obligations of carriers including those of interstate carriers as regulated by the Interstate Commerce Act. *Beale's Cases on Carriers (2d ed.); Wyman's Cases on Public Service Companies (2d. ed.); Frankfurter's Cases Under the Interstate Commerce Act.*

†**SURETYSHIP.** *Two hours second half year.* Nature of the contract; kinds of suretyship; the statute of frauds; surety's defenses based on the absence, suspension, or discharge of the primary obligation, or on conduct of the creditor prejudicial to the surety-rights; effect of notice of revocation by or death of the surety; subrogation; exoneration. *Ames' Cases on Suretyship.* Mr. SCHNEBLY.

TRUSTS. *Two hours.* The nature of a trust as distinguished from debt, bailment, equitable charge and executorship; the requisites for the creation of a trust including trustee, cestui que trust, object, consideration and the effect of the Statute of Frauds; the nature of the cestui's interest; the transfer of trust property by act of the parties, by death, by marriage, by insolvency and acts of creditors; the duties of the trustee in the administration of his trust. Resulting and constructive trusts. *Scoll's Cases on Trusts.* Mr. McLAIN.

WILLS AND ADMINISTRATION. *Three hours, second half year.* History of wills: The right to make a will; what is disposable under a will; form, execution, and attestation; revocation; who is entitled to administer upon an estate; distribution of an intestate's personalty; descent of realty; probate; letters testamentary and of administration; duties of executors and administrators. *Costigan's Cases on Wills.* Mr. SCHNEBLY.

INTERNATIONAL LAW. *Two hours.* A course on International Law and Diplomacy offered by the Faculty of Arts and Sciences. President COLLIER, Admiral STOCKTON, Professor HILL.

†Not given 1919-20.

SUMMER SESSION

A limited number of subjects are offered at the Summer Session. The purpose of this session is to lighten or supplement the work of the regular session by enabling students to take subjects usually taken in the regular session. These subjects may also be availed of to shorten the period of study for a degree. Students may begin the study of law at the Summer Session. The subjects offered in the summer session of 1920 (June 21 to August 3) will be Personal Property, Principles of Legal Liability, Domestic Relations, Equity II, Mortgages, Municipal Corporations, Quasi Contracts and Sales. See announcement of the summer session, 1920.

PUBLIC SPEAKING AND DEBATING

Excellent facilities for training in public speaking and parliamentary law are afforded by the Columbian Debating Society, which has been organized in the Law School, and meets weekly for debate. Membership in this Society is optional, but its work is encouraged by the Faculty, and students are advised to take part in its exercises.

Intercollegiate debates are also held. Membership on the teams which represent the University in these contests must be won in preliminary contests held for such purpose. These debates are conducted under the supervision of a committee of the University Faculty.

ATTENDANCE, RECITATIONS, EXAMINATIONS, GRADES, AND
ELIMINATION OF STUDENTS

Attendance and Recitations.—No student, except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the classes and have done all the work required in the course of instruction upon that subject. A student who is absent over ten per cent of the class hours in any subject will be denied credit unless his absences are excused by the Dean.

Regular Examinations.—Written examinations are held at the close of the first half-year in subjects which are then completed and at the close of the year in all other subjects. All students are required to take the regular examinations in the subjects pursued, unless excused by the Dean.

Grades.—At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing, respectively, Excellent, Good, Satisfactory, Fair, Conditioned, and Failed. A student receiving the grade F (failed) in any subject will be required to repeat the class work. A student receiving the grade of E (conditioned) in any subject will be required to repeat the class work unless he pass the next regular examination for the removal of conditions with a grade of at least C.

Examinations for the Removal of Conditions.—Regular examinations for the removal of conditions are held during the first week of each academic

year. A special examination for the removal of conditions is held at the end of each academic year for the benefit of candidates for the Bachelor's degree who have been conditioned in not more than four hours during the first half of their last year. Application for permission to take these examinations must be made in writing to the Secretary of the Law School not later than three days before the date for which the examination is scheduled.

Elimination of Students.—Students, regular or special, whose work is unsatisfactory, are required to withdraw from the school. The instructors of the first year class are a committee to examine the students' records, with power to warn, to place on probation, and to refuse reregistration to any student whose work is deemed unsatisfactory. This committee examines the records of all students immediately after the mid-year examinations and again after the final examinations.

DEGREES

1. *Bachelor of Laws.*—The degree of Bachelor of Laws will be conferred upon regular students who have studied law for a period of at least three years and passed satisfactory examinations with an average grade of at least C on required and elective subjects aggregating thirty-six year hours, and whose attendance and conduct have been satisfactory to the Faculty.

The degree of Bachelor of Laws with distinction will be awarded students whose average percentage in all subjects is equivalent to the grade of A.

2. *Master of Laws.*—The degree of Master of Laws will be conferred upon students who have completed the work in subjects not counted for the Bachelor of Laws degree covering a minimum of ten hours a week with a grade of C or better and whose attendance and conduct have been satisfactory to the Faculty. The subject of International Law offered by the Faculty of Arts and Sciences may be counted toward this degree. The degree will not be conferred until one year after the receipt of the degree of Bachelor of Laws.

3. *Master of Patent Law.*—Students who have qualified for the degree of Master of Laws may elect instead the degree of Master of Patent Law provided that they have included in their course the Patent Law subjects and Federal Procedure. This degree will not be conferred until one year after receipt of the degree of Bachelor of Laws.

Candidates for degrees who have been absent from school for two successive years shall be entitled to continue the course only on such terms as the Faculty may prescribe at the time of re-entering.

COMBINATION SIX-YEARS COURSE FOR DEGREES OF BACHELOR OF ARTS AND BACHELOR OF LAWS

The University permits one year of professional work in the Law School to be counted toward an academic degree. The degree of Bachelor of

Arts will be conferred on students who have completed three years of college work (45 units) including one of the four groups of subjects prescribed by Columbian College of the University, and the first year in the Law School; the degree of Bachelor of Laws on completing the whole six years of the combination course.

PRIZES

The John B. Larner Gold Medal.—A gold medal donated by Mr. John Bell Larner, Chairman of the Board of Trustees of the University, is awarded annually to that member of the graduating class who shall have attained the highest average grade in the entire course for the degree of Bachelor of Laws. Awarded 1918-19 to Bessie Wooten Newsom.

Herrick Prize.—A prize of twenty-five dollars cash, donated by Samuel Herrick, Esq., is awarded annually to that member of the graduating class, excepting the winner of the gold medal, who shall have attained the highest average grade in the entire work of the third year. Awarded 1918-19 to Howard Seaman Miller.

Blackstone Institute Prize.—A set of Modern American Law, donated by the Blackstone Institute, is awarded annually to that member of the graduating class, excepting the winner of the Herrick Prize, who shall have attained the highest average grade in the entire work of the third year. Awarded 1919-20 to Taylor Hudnall Stukes.

The Ordroneaux Prize Scholarship.—A prize scholarship, known as "The Ordroneaux Prize Scholarship," is awarded annually to that member of the second year class taking the regular course who shall have attained the highest average grade in the work of the second year. The recipient of this prize will be entitled to receive credit for tuition fees to the extent of one hundred dollars in his third year; library and diploma fees will remain payable. The award of this scholarship is purely personal and will not be commuted to a cash payment. The recipient of the scholarship must make use of it during the session next succeeding its award; otherwise it will be awarded to the person having the next highest grade. Awarded 1918-19 to Maxwell James.

Phi Delta Phi Prize.—The Marshall chapter of Phi Delta Phi Fraternity, which is the local chapter, offers a prize of twenty-five dollars cash, to be awarded annually to that member of the first year class taking the regular course who shall attain the highest average grade in the entire work of the year. Awarded in 1918-19 to John David Watkins.

Ellsworth Prize.—A prize of twenty-five dollars in gold, offered by Mr. Fitz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a student in the subject of Patent Law Practice. Awarded in 1918-19 to Edgar Cummings Sanborn.

John Byrne and Company Prize.—A prize offered by John Byrne and Company of Washington, D. C., of four volumes of their Legal Classics is awarded each year to the student attaining the highest grade in Real Property II. Awarded for 1918-19 to Maxwell James.

FEES

The following schedule of fees applies to all students who have matriculated in and been in attendance in the Law School prior to September 1, 1918.

1. Matriculation fee (payable once).....\$ 5
2. Library fee (payable annually one-half at the beginning of each half year)..... 3
3. Tuition fee per annum for each hour taken per week..... 10
4. Fee for graduation..... 10

The following schedule of fees applies to all students entering the Law School for the first time after September 1, 1918.

1. Registration fee (payable once upon first registration in the Law School).....\$ 5
2. Tuition fee per annum for each hour taken per week..... 12
3. Fee for graduation..... 10

No registration will be accepted for less than a half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. Students will be charged for all courses registered or until application for permission to drop them or to withdraw from the University has been made in writing to the Dean. Withdrawals during the half-year will be granted only on recommendation of the Dean and the approval of the President.

PAYMENT OF FEES

Matriculation and library fees are due in advance. Tuition may be paid in eight monthly installments in advance, but will not be apportioned for part of a month. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for \$200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1, of the current school year. Fees are payable at the office of the Treasurer of the University, 2101 G Street, or of the Secretary of the Law School.

STUDENTS' EMPLOYMENT

The School endeavors to assist students in finding work to aid in their support. Many out-of-town students take the United States Civil Service examinations in their various states and secure positions in the Government departments in Washington, where the hours of employment enable them to pursue the law course in the afternoon. Information concerning these examinations may be secured from the Civil Service Commission at Washington.

There are also opportunities for private employment which will help pay expenses, but the applicant must be on hand to take advantage of them. Prospective students should have the means of support for at least a half year to give them time to secure positions.

For catalogues, application blanks, and further information, address

THE SECRETARY OF THE LAW SCHOOL,
George Washington University.

PART III

STUDENTS IN THE UNIVERSITY

Names of students who have withdrawn or graduated are indicated by stars;
those who have entered since February 15, 1919, by daggers.

DEGREES CONFERRED, MISCELLANEA

STUDENTS REGISTERED IN THE DEPARTMENT OF ARTS AND SCIENCES, 1919-1920

Names of students who have withdrawn or graduated are indicated by stars;
those who have entered since February 1920, by daggers.

In the enumeration of undergraduate students the column of figures indicates the number of semester-hours of work taken by the student prior to the beginning of the current academic year, 1919-20, and completed without conditions, or credited on advanced standing in candidacy for a degree. In Columbian College 120 credits are required for graduation; in Teachers College, 124; in the College of Engineering, 140.

SCHOOL OF GRADUATE STUDIES

IN ATTENDANCE.

*ANDERSON, ARCHIBALD L. (Va.)	East Falls Church, Va.
Ph. B., 1900; B. E., Union College	
BEASLEY, PAULINE (Missouri)	1812 N St. N. W.
A. B., 1918, Drury College	
†BOURDEAUX, NELLIE G. (Miss.)	1908 Belmont Rd.
A. B., 1918, Mississippi Industrial Institute and College	
CARNAHAN, LINA WRIGHT (D. C.)	3606 13th St. N. W.
A. B., 1919, George Washington University	
*CARPENTER, GLENN WALTER (Ia.)	806 E St. N. E.
B. S., 1914, State University of Iowa	
*CLIFT, LINDA LEE (D. C.)	4115 7th St. N. W.
A. B., 1910, George Washington University	
DEE, JESSICA (N. Y.)	1712 17th St. N. W.
A. B., 1916, Wellesley College	
ECKMAN, JAMES ROY (Pa.)	325 Maryland Ave. N. E.
A. B., 1910, West Virginia University; A. M., 1917, Harvard University	
EVANS, EARL RADFORD (Mass.)	1518 R St. N. W.
M. E., 1918, Cornell University	
FOWLER, GLADYS (Mo.)	3351 18th St. N. W.
B. S., 1916, Kirksville State Normal	
FUSSELL, EDNA EVELYN (Fla.)	2510 M St. N. W.
A. B., 1911, Southern College, Florida	
GOLDSBY, ROBERT ECHOLS (Miss.)	431 6th St. S. W.
B. S., Mississippi College	
GUSTIN, ROBERT DANIEL (D. C.)	1802 G St. N. W.
HALL, AMY ROWENA (W. Va.)	1732 P St. N. W.
B. S., 1913, West Virginia Wesleyan University	
HAUKE, RILLA MAY (D. C.)	605 Massachusetts Ave. N. E.
A. B., 1919, George Washington University	
HENDRICKS, MARJORY EVEREST (D. C.)	2540 14th St. N. W.
A. B., 1918, University of Wisconsin	
HODGKINS, GEORGE WILSON (D. C.)	1830 T St. N. W.
A. B., 1915; A. M., 1916, George Washington University	
*JEWELL, MARY TALLULAH (Ga.)	1414 K St. N. W.
A. B. 1917, Brenau College	
KONNO, TOSABRO (Japan)	2218 18th St. N. W.
A. B., 1900, University of California; A. M., 1902, Columbia University	

- *KOTINSKY, JACOB (D. C.).....1470 Chapin St.
B. S., 1898, Rutgers College
- KUMP, MAUDE (Mo.).....1812 N St. N. W.
A. B., 1918, Drury College
- *LAMBERT, NAN SWAIN (N. C.).....915 Rhode Island Ave. N. W.
A. B., 1916, North Carolina College for Women
- LASHLEE, MARY NORMA (Tenn.).....835 Whittier St. N. W.
B. S., 1917, Cumberland University
- LINFIELD, FREDERICK BERTIL (Mont.)....3240 Interior Bldg.
B. S., 1917, Montana State College
- *MILLS, ABBOT PAIGE (Mass.).....1269 New Hampshire Ave.
A. B., 1911, Williams College; LL. B., 1914, Harvard University
- †MURPHY, ANNA LOUISE (Md.).....5346 41st St. Chevy Chase
A. B., 1918, Goucher College
- †MURRAY, MARY FRANCES (D. C.).....1317 Farragut St. N. W.
A. B., 1918, George Washington University
- OBERHELMAN, GEORGE OTTE (Ohio).....1354 Monroe St. N. W.
A. B., 1910; A. M., 1912, Yale University
- PHILLIPS, MAX (D. C.).....1827 7th St. N. W.
B. S., 1917; M. S., 1918, University of Wisconsin
- †SABURI, SADA O (Japan).....1310 N St. N. W.
A. B., 1905, Imperial Japanese University
- †SCOFIELD, HELEN COLE (Wis.).....3021 O St. N. W.
A. B., 1912, University of Wisconsin
- STEVENS, LULA REDWOOD (Miss.).....Govt. Hotels, G-H Bldg.
A. B., 1914, Mississippi Industrial Institute and College
- TOBIAS, ABRAHAM (Md.).....232 6th St. S. E.
B. S. in Eng., 1916, Johns Hopkins University
- †WHITE, CHARLOTTE LUCY (N. Y.).....1385 Park Ave. N. W.
A. B., 1915, Vassar College; A. M., 1916, Radcliffe College
- WIESENBERG, WILLIAM MAURICE (N. Y.)..1479 Harvard St. N. W.
B. S., 1914, College of the City of New York; C. E., 1918, Polytechnic
Institute of Brooklyn
- *WORRELL, EVERIL (D. C.).....1436 Meridian Place
A. B., 1915, George Washington University

MASTER OF ARTS.

- ADKINS, HARTWELL STANSBURY (Md.)....642 C St. N. E.
B. A., 1908, Washington and Lee University. *Topics:* Major, History;
Minor, Political Science
- *ASGHAR, ALI (Mirza Ali Asghar Khan z.K.)
(Persia).....1513 16th St.
A. B., 1901, Ecole des Sciences Politiques a Teheran. *Topics:* Major,
Political Science; Minors, Economics; History
- BARSE, GEORGE PERCY (D. C.).....1365 B St. S. E.
A. B., 1917, George Washington University; LL. B., 1908, LL. M.,
1909, National University Law School. *Topics:* Major, History,
Minors, Commerce, Political Science
- BENNETT, RUTH HILTON (D. C.).....3420 Mt. Pleasant St.
A. B., 1919, George Washington University. *Topics:* Major, Political
Science; Minor, History
- †BOBBITT, LINGURN BURKHEAD (D. C.)...216 11th St. S. W.
A. B., 1911, Johns Hopkins University. *Topics:* Major, English; Minor,
History
- BRANDES, WALTER CHRISTIAN (D. C.)...2032 16th St. N. W.
Ph. B., 1916, Yale University. *Topics:* Major, History; Minors, Po-
litical Science; English

- BURKE, ELLEN TERESA (D. C.).....531 Jefferson St.
A. B., 1916, George Washington University. *Topics*: Major, English;
Minors, Sociology, French
- BUTTS, (MRS.) FRANCES MOON (Va.)....Business High School
A. B., 1919, George Washington University. *Topics*: Major, Education;
Minors, Education, Commerce
- CALLAHAN, DOLLY MARTHENA (Va.)....209 Duke St. Alexandria
A. B., 1919, George Washington University. *Topics*: Major, History,
Minor, Political Science
- CAMPBELL, JOHN ALVIN (D. C.).....4508 8th St. N. W.
B. L., 1904, Westminster College; Allegheny Theological Seminary.
Topics: Major, English; Minors, History
- CASTILLEJO, LINO JUAN (Philippine Is-
lands).....146 House Office
A. B. and T. D., 1919, George Washington University. *Topics*: Major,
Commerce; Minors, Commerce, Political Science
- *CHANG, KIN-FANG (China).....2312 19th St. N. W.
A. B., 1913, St. John's University, Shanghai. *Topics*: Major, History;
Minors, Economics, Commerce
- *COLE, ELTA JEAN (Ia.).....1223 15th St. N. W.
B. S., 1915, New York State College for Teachers. *Topics*:
- CONNER, LULU ELIZABETH (D. C.).....2506 K St. N. W.
A. B., 1908, George Washington University. *Topics*: Major, English;
Minor, French
- *COOK, PERSIS BELL (Kan.).....1669 Columbia Rd.
A. B., 1918, University of Kansas. *Topics*: Major, Economics; Minor,
History
- *COSTEN, ALTA (Md.).....East Falls Church, Va.
A. B., 1917, George Washington University. Major, History; Minors.
Economics; History
- †COUGHLIN, MILDRED MARGARET, (Kansas) 5347 41st St. Chevy Chase.
A. B., 1918, Washburn College. *Topics*: Major, English; Minors, Com-
merce, History
- *CUMMINGS, GLADYS REX (Mass.).....Gov't. Hotels, G-H Bldg.
A. B., 1914, Syracuse University. *Topics*: Major, English; Minor,
Education
- †DANIEL, ROBERT CLINTON (Va.).....629 Y. M. C. A.
A. B., 1909, Virginia Christian College. *Topics*: Major, Economics;
Minors, Commerce; Political Science
- DOLLARHIDE, DANIEL AUGUSTUS (Ark.)...1736 G St. N. W.
A. B., 1916, Henderson-Brown College. *Topics*: Major, Commerce;
Minors, Commerce, Political Science
- ELDRIDGE, HARRIET DAYTON (D. C.).....
A. B., 1917, George Washington University. *Topics*: Major, English;
Minors, English, Education
- *ELY, CLARA HARRISON STRANAHAN (N. J.)
.....927 Farragut Square
A. B., 1911, University of Michigan. *Topics*: Major, History; Minors,
Commerce
- †ERLANDSON, RAY SANFORD (Wis.).....1304 Euclid St. N. W.
A. B., 1918, University of Wisconsin. *Topics*: Major, Education; Mi-
nors, Economics
- †FERGUSON, ELIZABETH GRIEVE (Ga.)...1935 Park Rd. N. W.
A. B., 1919, Randolph-Macon Women's College. *Topics*: Major, En-
glish; Minors, Sociology, History

- GALESKI, ALEXANDRA L. (D. C.).....The Mendota Apt. 76
A. B., 1918, George Washington University. *Topics*: Major, English;
Art, History
- GEARE, (MRS.) DOROTHY SMALLWOOD (D.
C.).....2400 16th St. N. W.
A. B., 1912, George Washington University. *Topics*: Major, English;
Minors, Philosophy, Education
- GLASER, FREDA ELIZABETH (Wis.).....1447 Clifton St. N. W.
A. B., 1917, Lawrence College. *Topics*: Major, English; Minors, Socio-
logy, Art
- GSANTNER, OTTO CARL (D. C.).....2311 24th St. N. E.
A. B., 1915, George Washington University. *Topics*: Major, English;
Minors, Education, English. Degree conferred, February 23, 1920.
- HANFORD, FLORENCE LILLIAN (Conn.)....2233 Q St. N. W.
A. B., 1915, Smith College. *Topics*: Major, English; Minors, French,
Political Science
- *HASLUP, ALICE ELMA (D. C.).....2114 18th St. N. W.
A. B., 1912, George Washington University. *Topics*: Major, Educa-
tion; Minors, English, Spanish
- HAYWOOD, WILLIAM FRANKLIN (Texas)...413 9th St. S. E.
A. B., 1917, Howard Payne College. *Topics*: Major, History; Minors,
Economics, Education
- HESTER, (MRS.) LAURA PYWELL (Va.).. 1205 15th St. N. W.
A. B., 1919, George Washington University. *Topics*: Major, English;
Minors, Psychology
- †HEWETT, CHARLES MADISON (Ia.).....3226 Park Place N. E.
A. B., 1917, Upper Iowa University. *Topics*: Major, English; Minors,
Education, Economics
- †HILL, EDITH ESTHER (Ind.).....10 Florida Ave.
A. B., 1916, Indiana University. *Topics*: Major, Mathematics
- HOLLIS, FAYE PEARL (Kan.).....1304 Shepherd St., N. W.
A. B., 1916, Baker University. *Topics*: Major, Economics
- HOLMES, HARRY CLYDE (Kan.).....116 6th St. N. E.
LL. B., 1916, Georgetown University. *Topics*: Major, Commerce; Mi-
nors, Economics, Political Science
- HONEYCUTT, WILLIAM ELISHA (N. C.)...112 3d St. N. E.
A. B., 1919, Wake Forest College. *Topics*: Major, Sociology; Minors,
Law, Political Science
- HOOKER, MERCY BEARDSLEY (Ill.).....1833 S St. N. W.
A. B., 1913, Oberlin College. *Topics*: Major, Political Science
- HOSKINS, (MISS) FRANK BYRNE (Tenn.)..4623 Georgia Ave, N. W.
A. B., 1915, Tennessee College. *Topics*: Major, History; Minors, Eng-
lish, Latin
- *KERN, ATTA BROOKS (Ohio).....714 18th St. N. W.
A. B., 1918, Ohio University. *Topics*: Major, German; Minors, English
- KETTLESEN, PAULINE (Ia.).....1830 Park Rd. N. W.
A. B., 1918, Cornell College. *Topics*: Major, Commerce; Minors, Eco-
nomics
- *KNOWLES, MARGARET MORTON (Va.) East Falls Church, Va.
A. B., 1916, George Washington University. *Topics*: Major, English;
Minors, History, English
- LEE, MARY ELIZABETH (Ark.).....2025 North Capitol St.
A. B., 1901, Ouachita College. *Topics*: Major, English; Minors, History
- †LENSKI, GERHARD EMMANUEL (Ohio)...1511 Columbia St. N. W.
A. B., 1910, Capital University (O). *Topics*: Major, Philosophy; Mi-
nors, History, Education

- LINDSEY, MERRITT EUGENE (N. Y.).....4013 14th St. N. W.
Diploma, 1901, University of New York; B. Ped., 1902; B. S., 1904.,
Ohio Northern University. *Topics*: Major, Economics; Minors, His-
tory, Political Science
- LLOYD, LEONILA MARIE (D. C.).....54 Manor House
A. B., February 22, 1919, George Washington University. *Topics*:
Major, Economics; Minors, History Political Science
- LOCKMAN, MABEL (Pa.).....1120 Rhode Island Ave. N. W.
A. B., 1917, Wilson College. *Topics*: Major, History; Minors, Soci-
ology
- LOYALL, JENNIE (Ga.).....1760 Euclid St. N. W.
A. B., 1912, Wesleyan College, Ga. *Topics*: Major, Education; Minors,
Philosophy, History
- MACE, BRICE MARTIN, JR. (D. C.).....1907 G St. N. W.
A. B., 1908, Cumberland University. *Topics*: Major, Commerce; Mi-
nors, Economics, History
- *MCNEAL, OTTIE (Mo.).....1409 15th St. N. W.
A. B., 1913, University of Kansas. *Topics*: Major, English
- MENG, HSIEN-CHENG (China).....2312 19th St. N. W.
A. B., 1916, St. John's University, Shanghai *Topics*: Major, Education;
Minors, Philosophy, Education.
- MOORE, HARRY HASCALL (D. C.).....1659 Newton St. N. W.
A. B., 1917, Reed College. *Topics*: Major, Education, Minors, Educa-
tion, Sociology
- MORAN, CATHARINE REGIS (D. C.).....1727 Columbia Rd.
A. B., 1919, George Washington University. *Topics*: Major, English;
Minors, French, Philosophy
- NEVINS, RUBY (D. C.).....1421 Columbia Rd. N. W.
A. B., 1917, George Washington University. *Topics*: Major, English;
Minors, English, History
- †NORTON, FREDERICK ALOYSIUS (Mass.)...59 Bryant St. N. W.
B. S., 1919, as of 1918, Harvard University. *Topics*: Major, Chemis-
try; Minors, Economics, Preventive Medicine
- *OTTERBACK, PHILIP GRAHAM (D. C.)....3529 13th St. N. W.
B. S., 1918, Colgate University. *Topics*: Major, Economics; Minors,
Commerce
- †PARGOT, ISIDOR (N. Y.).....1012 C St. S. W.
A. B., 1919, New York State College for Teachers. *Topics*: Major,
English; Minors, Philosophy
- *PARSONS, BERTH (D. C.).....125 Willow Ave. N. W.
A. B., 1918, George Washington University. *Topics*: Major, English;
Minors, History
- *PHEBUS, MILDRED ANNA (D. C.).....1925 North Capitol St.
A. B., 1916, George Washington University. *Topics*: Major, Commerce
- †PREINKERT, ALMA HENRIETTA (D. C.)...1511 L St. N. W.
A. B., 1916, George Washington University. *Topics*: Major, English;
Minors, History
- REEVE, FELICIA ANN (D. C.).....1626 19th St. N. W.
A. B., 1917, George Washington University. *Topics*: Major, French;
Minors, French, Spanish
- RISTER, CARL COKE (Tex.).....1602 Brentwood Rd.
A. B., 1915, Simmons College, Texas. *Topics*: Major, History; Minors,
Economics, Commerce
- ROSE, HELEN MARIE CECILIA (Ill.).....1320 U St. N. W.
Ph. B., 1919, University of Chicago. *Topics*: Major, Mathematics,
Minors, English, Education

- *ROSENSTEIN, DAVID (N. Y.).....1860 Park Rd.
B. S., 1916, College of the City of New York. *Topics:* Major, Sociology; Minors, Economics, Philosophy
- SCHOENFELD, MARGARET HERTHA (D. C.). 3448 34th Place
A. B., 1918, George Washington University. *Topics:* Major, Economics; Minors, Economics, Political Science. (Degree of A. M. conferred, February 23, 1920).
- SCOTT, DOROTHY BERKSHIRE (D. C.).....16 Fifth St. S. E.
A. B., 1915, University of Omaha. *Topics:* Major, Chemistry; Minors, Chemistry, Bacteriology
- SHARP, IVOR (Utah).....71 Cumberland Apts.
B. S., 1917, Utah Agricultural College. *Topics:* Major, Commerce; Minors, Political Science, English
- SIMPSON, MARY KIRK (D. C.).....3404 Prospect Ave. N. W.
A. B., Grove City (Pa.) College. *Topics:* Major, Ethnology, Minors, Ethnology, French and Spanish
- SMITH, KATHERINE AMANDA (Fla.).....Govt. Hotels, E-F Bldg.
B. S., 1916, Florida State College for Women. *Topics:* Major, English
- SOULE, LIEUT. EDGAR CLARKE (Texas)....1832 Biltmore St.
A. B., 1919, University of Texas. *Topics:* Major, Commerce; Minors, Political Science, Commerce
- STEGER, MARY EVELYN (D. C.).....1906 Florida Ave.
A. B., February 22, 1918, George Washington University. *Topics:* Major, English; Minors, Education, Archaeology
- *STORY, SANDY STUART (Tenn.).....824 5th St. N. E.
A. B., 1914, Carson & Newman College. *Topics:* Major, Philosophy; Minors, English
- STRAYER, (Mrs.) JEANNETTE BLANEY
(N. Y.).....Portner Apts.
A. B., 1919, George Washington University. *Topics:* Major, History; Minors, Political Science, Philosophy
- SULLIVAN, MARY RUTH (Va.).....127 3d St. N. E.
A. B., 1913, Fredericksburg College. *Topics:* Major, Philosophy; Minors, Latin, Philosophy
- SUMMY, ETHEL ISABELLE (D. C.).....1724 Kilbourne Place
A. B., 1918, George Washington University. *Topics:* Major, Education; Minors, Education, English
- TEAGUE, EUDORA ETHEL (Tex.).....1715 14th St. N. W.
A. B., 1918, Southern Methodist University. *Topics:* Major, English; Minors, Economics, Archaeology
- THOMAS, LISLE (Mich.).....1416 R St. N. W.
A. B., 1917, George Washington University. *Topics:* Major, Commerce; Minors, Law
- WARNER, HAROLD ELLSWORTH (D. C.)....914 Massachusetts Ave. N. W.
A. B., 1913, George Washington University. *Topics:* Major, Education; Minors, Economics
- WEBER, (Mrs.) ANGELIA WASHBURN
(Colo.).....Carr, Colo.
A. B., 1912, Colorado State Teachers College. *Topics:* Major, Education; Minors, English, Education
- WELLS, JESSIE LANDER (Tenn.).....107 Rhode Island Ave. N. W.
A. B., 1911, University of Colorado. *Topics:* Major, Philosophy; Minors, Sociology, English
- WELTY, RAYMOND LEO (Kan.).....1008 22d St. N. W.
B. S. in Education, 1918, Kansas Fort Hayes Normal School. *Topics:* Major, History, Minors, Political Science, Commerce

- WESTCOTT, LYDIA ELIZABETH (Ky.).....1433 L St. N. W.
 A. B., 1914, State University of Kentucky. *Topics:* Major, English
- WILLIAMS, MARY FELICIA (Fla.).....1824 G St. N. W.
 A. B., 1914, Florida State College for Women. *Topics:* Major, English;
 Minors, English, Education
- WILLIS, (Mrs.) LOIS EMMA PEIRCE (D.
 C.).....229 Pa. Ave. S. E.
 A. B., 1917, George Washington University. *Topics:* Major, Educa-
 tion; Minors, Philosophy
- WRIGHT, GRACE VIOLA (D. C.).....The Montgomery
 A. B., 1919, George Washington University. *Topics:* Major, Psychol-
 ogy; Minors, Philosophy, Sociology
- YANG, YUNG-CHING (China).....Chinese Legation
 A. B., 1910, Soochow University. *Topics:* Major, Political Science;
 Minors, Political Science, History. (Degree of A. M. conferred,
 February 23, 1920)
- YEATON, ERNEST E. (Me.).....909 13th St. N. W.
 Ph. B., 1914, Brown University. *Topics:* Major, Political Science, Mi-
 nors, Economics
- YEN, EN TSUNG (China).....2015 19th St. N. W.
 A. B., 1918, Shanghai Baptist College. *Topics:* Major, Political Science;
 Minors, History, Philosophy
- YOUNG, (Mrs.) AUGUSTA FREEMAN (N.
 D.).....1830 16th St. N. W.
 A. B., October, 1918, George Washington University. *Topics:* Major,
 English; Minors, History, Art

MASTER OF SCIENCE.

- BASS, NATHAN WOOD (Kan.).....706 20th St. N. W.
 B. S., 1917, Kansas Agricultural College. *Topics:* Major, Geology;
 Minors, Geology Zoology
- *BISCHOFF, HENRY WILLIAM (N. Y.).....2926 Upton St.
 E. E., 1916, Columbia University. *Topics:* Major, Electrical Engineer-
 ing; Minors, Physics, Chemistry
- BOONE, PEARL VIRGINIA LEE (D. C.).....U. S. National Museum
 A. B., 1919, George Washington University. *Topics:* Major, Zoology;
 Minors, Geology
- †BROWN, JOHN STAFFORD (Mo.).....1909 G St. N. W.
 B. S., 1917, Missouri School of Mines. *Topics:* Major, Geology
- BUCHANAN, RUTH (Pa.).....1822 I St.
 B. S., 1919, University of Pittsburgh. *Topics:* Major, Chemistry; Mi-
 nors, Bacteriology, Preventive Medicine
- BURRITT, LOREN (D. C.).....1855 Calvert St.
 B. S., 1917, Maryland State College. *Topics:* Major, Chemistry; Mi-
 nors, Bacteriology, Chemistry
- CORBITT, HUGH BLAKE (Wash.).....Hygienic Laboratory
 B. S., 1913, University of Washington. *Topics:* Major, Chemistry;
 Minors, Chemistry
- CORLEY, WILLIAM ANGUS, LIEUT.-COMDR.,
 U. S. N.....507 Florence Court
 Grad., U. S. Naval Academy, 1912. *Topics:* Major, Chemistry; Mi-
 nors, Chemistry
- CULLEN, ELIZABETH ORLAN (D. C.).....307 B St. N. E.
 A. B., 1918, George Washington University. *Topics:* Major, Geology
- DAUBNEY, ROBERT (England).....1807 California St.
 M. R. C. V. S., 1913, Royal College of Veterinary Surgeons. *Topics:*
 Major, Zoology; Minors, Zoology, Pathology

- EVANS, MORGAN WILLIAM (O.).....North Ridgeville, O.
B. S. A., 1906, Cornell University. *Topics:* Major, Botany, Minors,
Zoology, Chemistry
- FISCHER, HERMAN EDWARD, LIEUT.-
COMDR., U. S. N.....1830 16th St.
Grad., U. S. Naval Academy. *Topics:* Major, Chemistry; Minors,
Chemistry
- FOSTER, MARGARET DOROTHY (D. C.)....2112 F St. N. W.
A. B., 1918, Illinois College. *Topics:* Major, Chemistry
- GERSDORFF, WILBUR AUGUST (D. C.)....1825 North Capitol St.
B. S. in Chemistry, George Washington University. *Topics:* Major,
Chemistry; Minors, Geology, Ethnology
- *GULLICKSON, THOR WILLIAM (D. C.)....114 Park Ave. Takoma Pk., D.C.
B. S., 1918, University of Minnesota. *Topics:* Major, Economics
- HAMILTON, BONIFANT (D. C.).....3135 24th St. N. E.
B. S., 1918, George Washington University. *Topics:* Major, Chemistry;
Minors, Chemistry, Bacteriology
- HAYES, MURRAY OSWALD (D. C.).....719 A St. N. E.
A. B., 1914, Brigham Young University. *Topics:* Major, Geology;
Minors, Geology, Education
- *HEMMINGS, HARRY HOWARD (N. Y.)....611 Y. M. C. A.
C. E., 1917, Cornell University. *Topics:* Major, Applied Mathematics;
Minors, Mathematics, Physics
- JOHNSON, OTTO THEOPHILUS (Vt.).....3545 13th St. N. W.
B. S. in E. E., 1914, University of Vermont. *Topics:* Major, Physics
and Electrical Engineering; Minors, Philosophy
- LEWIS, OLLIE LEE (Ky.).....U. S. Weather Bureau
A. B., 1917, George Washington University. *Topics:* Major, Physics;
Minor, Applied Mathematics
- MEISINGER, CLARENCE LE ROY (Neb.)....3331 Stephenson Place
Chevy Chase, D. C.
B. S., 1917, University of Nebraska. *Topics:* Major, Meteorology;
Minors, Meteorology, Astro-Physics
- MERRITT, GEORGE ERNEST (D. C.).....3631 35th St. N. W.
A. B., 1913, Pomona College. *Topics:* Major, Physics; Minors, Mathe-
matics
- MIN, HSIAO WEI (China).....Chinese Legation
B. S., 1916 Peiyang Government University. *Topics:* Major, Mechan-
ical Engineering; Minors, Geology, Geology. (Degree of M. S. con-
ferred, February 23, 1920).
- MOULTON, STANLEY CHENEY (Va.).....348 Bureau of Plant Industry
B. S., 1918, University of Virginia. *Topics:* Major, Chemistry; Minors,
Chemistry, Mathematics
- PALEY, LEWIS ADOLPHUS (Ia.).....259 W. 112th St. N. Y. City
B. S. in Chemistry, 1917, George Washington University. *Topics:*
Chemistry; Minors, Chemistry, Engineering
- *PETTYJOHN, OTHO ALBERT (Okla.).....622 Eye St. N. W.
A. B., 1917, Oklahoma University. *Topics:* Major, Chemistry; Mi-
nors, Chemistry, Preventive Medicine
- PHILLIPS, GEORGE WASHINGTON (D. C.)..612 18th St.
B. S. in Chemistry, February 22, 1917; George Washington University.
Topics: Major, Chemistry; Minors, Chemistry, Physics
- *SCHUNK, OLIVER HENRY (Wis.).....2926 Newark St.
B. S., 1917, University of Wisconsin. *Topics:* Major, Chemistry
- †SMITH, BENJAMIN HARRISON (Ind.)....1819 G St. N. W. Apt. 606
A. B., 1917, Wabash College. *Topics:* Major, Botany; Minors, Zoology,
Economics

- STEEVER, LAURA WINFIELD (D. C.).....2106 F St. N. W.
 B. S., 1911, George Washington University. *Topics:* Major, Preventive Medicine; Minors, Education, Sociology
- *STINE, RALPH EDWARD (Pa.).....1849 Ontario Pl. N. W.
 A. B., 1919, Pennsylvania College. *Topics:* Major, Chemistry; Minors, Physics, Mathematics
- WEEKS, DOROTHY WALCOTT (D. C.).....3461 Lowell St.
 A. B., 1916, Wellesley College. *Topics:* Major, Electrical Engineering; Minors, Physics
- WHITSON, ALICE IVA (N. C.).....1209 Otis Place N. W.
 B. S., 1912, North Carolina State College for Women. *Topics:* Major, Bacteriology; Minors, Chemistry
- WILLIS, WARREN JENNISON (Minn.).....Hydrographic Office
 Grad., 1912, U. S. Naval Academy; A. B., February 22, 1918; A. M., 1919, George Washington University. *Topics:* Major, Electrical Engineering; Minors, Chemistry
- WRIGHT, CARLETON HERBERT, LIEUT.-
 COMDR., U. S. N.1436 R St. Apt. 32
 Grad., 1912, U. S. Naval Academy. *Topics:* Chemistry; Minors, Chemistry
- YOUNG, JAMES LAWRENCE (D. C.).....
 B. S. In Chemistry, 1917, George Washington University. *Topics:* Major, Chemistry; Minors, Chemistry, Physics

CIVIL ENGINEER.

- ASMUS, LEWIS DURAND (N. J.).....310 11th St. N. E.
 B. S. in C. E., 1918, Drexel Institute. *Topics:* Major, Civil Engineering; Minors, Geology, Mechanical Geology
- DAVIS, WATSON (D. C.).....1418 Rhode Island Ave. N. W.
 B. S., 1918, George Washington University. *Topics:* Major, Civil Engineering; Minors, Geology, Economics
- *HOWELL, BEAUDRIC LA FITTE (Va.)....818 Union Trust Bldg.
 C. E., 1910, University of Virginia. *Topics:* Major, Sanitary Engineering
- KESSLER, DANIEL WILLIAM (D. C.).....221 Prospect Place
 B. S. In C. E., 1908, University of Missouri. *Topics:* Major, Civil Engineering; Minors, Geology, Mineralogy

MECHANICAL ENGINEER.

- HEALD, ROY HAINES (D. C.).....5823 Colorado Ave. N. W.
 B. S. in M. E., 1919, George Washington University. *Topics:* Major, Mechanical Engineering; Minor, Commerce

DOCTOR OF PHILOSOPHY.

- ANDERSON, MYRON SALLEE (D. C.).....1440 W St. N. W.
 A. B., 1913, Simpson College; M. S., 1916, Iowa State College. *Topics:* Major, Chemistry; Minors, Geology, Chemistry
- BENNETT, RALPH CULVER (N. Y.).....New Willard Hotel
 A. B., 1906; A. M. and LL. B., 1909; D. C. L., 1912, Yale University.
Topics: Major, Political Science; Minors, Law, History
- *BEVARD, KATHERINE HARPER (Pa.).....1423 R St. N. W.
 A. B., 1911; A. M., 1913, George Washington University. *Topics:* Major, Education; Minors, Education, English

- CAMERON, JOHN JOSEPH (Conn.).....2715 P St. N. W.
A. B., 1915, Yale University. *Topics*: Major, Political Science; Minors, Economics
- CAVINESS, LEON LESLIE (Md.).....721 Carroll Ave. Tak. Pk., Md.
A. B., 1906 University of Michigan; A. M., 1913, University of Nebraska.
Topics: Major, Semitics; Minor, Education
- CHAPIN, EDWARD ALBERT (Mass.).....1358 B St. S. W.
Ph. B., 1916; Yale University; M. S., 1917, Massachusetts Agricultural College. *Topics*: Zoology; Minors, Zoology, Geology
- CHU, KING (China).....2108 H St. N. W.
A. B., February 22, 1919; A. M., 1919; George Washington University.
Topics: Major, Political Science; Minors, Education, Political Science
- DONK, PETER JOHN (D. C.).....1706 F St. N. W.
B. S. in Chemistry, 1917, George Washington University. *Topics*: Major, Bacteriology; Minors, Bacteriology, Chemistry
- ELVOYE, ELIAS (D. C.).....1228 H St. N. E.
B. S., 1903; M. S., 1904, University of Kentucky; Ph. D., 1910, George Washington University. *Topics*: Major, Chemistry; Minors, Pharmacology, Physiology. (Degree of Ph. D. conferred February 23, 1920.)
- FAY, DUDLEY WARD (N. Y.).....Hotel Arlington
A. B., 1907, Williams College. *Topics*: Major, Psychology; Minors, Psychiatry, Neuro-Pathology
- GARBER, JOHN ABSALOM (Va.).....204 4th St. S. E.
A. B., 1891, Bridgewater College; A. M., 1915, George Washington University. *Topics*: Major, Education; Minors, Sociology, Philosophy
- GARBY, CARL D. (Idaho).....Bureau of Chemistry
B. S. in Chemical Engineering, 1914, University of Idaho. *Topics*: Major, Chemistry; Minors, Physics, Geology
- GIDLEY, JAMES WILLIAMS (D. C.).....1339 Meridian Place
B. S., 1888; M. S., 1890, Princeton University. *Topics*: Major, Paleontology; Minors, Economic Geology, Zoology
- GRANT, DUDLEY HOPKINS (O.).....Bureau of Chemistry
B. S., 1914, University of Chicago; M. S., 1917, George Washington University. *Topics*: Major, Chemistry; Minors, Preventive Medicine, Geology
- HENRY, JERRY MAURICE (Va.).....337 North Carolina Ave. S. E.
A. B., 1909, Bridgewater College; A. M., February 22, 1919, George Washington University. *Topics*: Major, Education; Minors, Economics, History
- HOBBS, EWART WILLIAM (D. C.).....2111 18th St.
LL. M., 1910, National University Law School; A. B., 1916, A. M., 1917, George Washington University. *Topics*: Major, Philosophy, Minors, Philosophy, English
- *JOHN, OTTO MARION (Ill.).....719 Carroll Ave. Tak. Pk. D. C.
A. B., 1908, Union College; M. S., 1917, George Washington University. *Topics*: Major, Chemistry, Minors, Zoology, Bacteriology
- KAYSER, ELMER LOUIS (D. C.).....3129 O St. N. W.
A. B., 1917; A. M., 1918, George Washington University. *Topics*: Major, History; Minor, Political Science
- *KITICH, ZHIVOIN (Serbia).....1322 L St. N. W.
LL. B., National University Law School. *Topics*: Major, Economics; Minors, Law, Philosophy
- LENNON, MARQUIS LAFAYETTE (Tenn.)...1229 6th St. N. W.
A. B., 1912, Union University; M. A., 1919, George Washington University. *Topics*: Major, Education; Minors, Political Science; Sociology

- MCARTHUR, LOUIS EUGENE (Utah).....2112 F St. N. W.
B. Ped., 1897, Brigham Young University; A. B., 1916; A. M., 1917,
George Washington University. *Topics*: Major, Political Science; Mi-
nors, History, Economics
- MAGNUSON, HARRY PETER (Neb.).....1518 R St. N. W.
B. S. in Agriculture, 1916, University of Nebraska. *Topics*: Major,
Chemistry; Minors, Chemistry, Botany
- MOORE, FRANK DEANE (D. C.).....1324 Euclid St.
A. B., 1918; A. M., October, 1919, George Washington University.
Topics: Major, Geology; Minors, Chemistry, Ethnology
- MOREHOUSE, ALANSON DAVID (D. C.)....1526 O St. N. W.
M. E., 1893, Cornell University. *Topics*: Major, Hydraulic Engineering;
Minors, Economics, Meteorology
- MUERMAN, JOHN CHARLES (D. C.).....1701 Park Rd.
A. M., 1916, George Washington University. *Topics*: Major, Educa-
tion; Minors, Education, Sociology
- PIERCE, ROY CLIFFORD (Neb.).....6813 5th St. Tak. Pk. D. C.
A. B., 1907; B. S., 1907, University of Nebraska, M. S., 1908, Univer-
sity of Michigan. *Topics*: Major, Botany; Minors, Botany, Zoology
- RAINE, WENDELL PHILLIPS (D. C.).....1731 S St. N. W.
B. S. in E., 1907; M. A., 1911, University of Pennsylvania. *Topics*:
Major, Commerce; Minors, Political Science, Sociology
- ROE, JOSEPH HYRAM (Va.).....2823 14th St. N. W.
A. B., 1916, Roanoke College; A. M., 1917, Princeton University. *Top-
ics*: Chemistry
- SAFFORD, WILLIAM EDWIN (D. C.).....3339 Mt. Pleasant St.
Grad., 1880, U. S. Naval Academy. *Topics*: Major, Botany; Minors,
Anthropology, Zoology
- SALISBURY, ELON GALUSHA (D. C.).....127 Carroll St. Tak. Pk. D. C.
B. S., 1911, Union College; A. M., 1917, George Washington University.
Topics: Major, Education; Minors, Philosophy, Sociology
- †SAUNDERS, ELEANORA BENNETTE (S. C.) .St. Elizabeth's Hospital
B. S., 1901, Chicora College; M. D., 1907, Medical College of South Caro-
lina. *Topics*: Major, Psychology (Abnormal); Minors, Psychology,
Psychiatry
- SCHMITT, WALDO LASALLE (D. C.).....2233 18th St. N. W.
B. S., 1913, George Washington University; A. M., 1916, University
of California. *Topics*: Major, Zoology; Minors, Zoology, Paleon-
tology
- SCHWARTZ, BENJAMIN (D. C.).....1440 Meridian Place N. W.
A. B., 1911, College of the City of New York; A. M., 1913, Columbia
University. *Topics*: Major, Zoology; Minors, Bacteriology
- SHINN, ERWIN HENRY (Ark.).....1735 F St. N. W.
A. B., 1910, Arkansas University; B. S., 1916, Oklahoma Agricultural
and Mechanical College; A. M., 1919, George Washington University.
Topics: Major, Education; Minors, Agricultural Education, Sociology
- SNYDER, THOMAS ELLIOTT (D. C.).....1430 V St. N. W.
A. B., 1907, Columbia University; M. E., 1909, Yale University. *Top-
ics*: Major, Zoology; Minors, Zoology, Paleontology. (Degree of Ph.
D. conferred, February 23, 1920.)
- WARSHOW, HERMAN (N. Y.).....1210 Euclid St. N. W.
A. B., 1916; A. M., 1917, Cornell University. *Topics*: Major, Econom-
ics; Minors, Sociology, Commerce

- WETMORE, ALEXANDER FRANK (D. C.)... 1912 Hamlin St. N. E.
 A. B., 1912, University of Kansas; M. S., 1916, George Washington University. *Topics:* Major, Zoology; Minors, Zoology, Paleontology.
 (Degree of Ph. D. conferred February 23, 1920.)
- WILKINSON, OSCAR (Miss.)... 1408 L St. N. W.
 Ph. B., University of Mississippi; M. A., Columbia University; M. D., Tulane University. *Topics:* Ophthalmology

COLUMBIAN COLLEGE

CANDIDATES FOR THE DEGREE OF
BACHELOR OF ARTS

ABELL, EMMA B. (0)	Pa.	1363 Park Road
ADAMS, JAMES MARRIL RYLAND (113)	D. C.	905 8th St.
ADAMS, LESLIE HAROLD (78)	D. C.	1637 Harvard Terrace
AIKEN, CAROLYN BACOME (30)	Tenn.	1845 North Capitol St.
AIKEN, SAM BACOME (25)	Tenn.	1845 North Capitol St.
ALEXANDER, MABEL C. (10)	Wash.	2106 F St.
ALLEN, RUTH FRANCES (86)	D. C.	1460 Monroe St.
ALLEN, WALTER RUDOLPH (12)	N. Y.	927 E St. N. E.
ALSEEN, MYRTLE F. C. (45)	Minn.	1465 Meridian Place
AMAN, JOHN ANDREW (101)	Md.	Mt. Rainier, Md.
AMUNDSON, CHARLES E. (0)	Minn.	1225 L St.
ANDERSON, EDITH A. (12)	Ill.	1305 Conn. Ave.
ANDERSON, NELL TRABUE (0)	D. C.	1536 16th St.
ANDERSON, ROBERT NELSON (63)	Va.	60 Randolph Place
ANDERSON, RUTH VIRGINIA (12)	D. C.	60 Randolph Place
ANDERSON, WALTER IRWIN (0)	Pa.	Cherrydale, Va.
ANDREWS, ALICE (6)	Ohio	625 G St. S. W.
ARNOLD, ROSEMARY (40)	D. C.	24 Second St. N. E.
ASHFORD, ALICE MAY (0)	N. Y.	924 C St. N. E.
ATEN, RALPH PRESSLEY (0)	D. C.	1432 Meridian St.
*AULTMAN, EDITH H. (24)	D. C.	The Northumberland
AUSTIN, VIOLET K. (0)	Md.	122 Willow Ave. Takoma Park, Md.
AYRES, KATHRYN ELIZABETH (30)	D. C.	The Portner
AYRES, MARGARET ELEANOR (30)	D. C.	The Portner
BAER, JOHN L. (93)	Pa.	The Maury
*BAINES, THELMA A. (0)	D. C.	156 R St. N. E.
*BAKER, SUSIE VAUGHAN (12)	Va.	49 Bryant St.
BALDWIN, ALICE (0)	D. C.	1804 Kilbourne Pl.
BALL, CHARLES OLIN (100)	Kansas	1739 H St.
*BALLARD, EULA MAY (0)	Texas	712 F St.
BALLINGER, WILLIAM McCORMICK (72)	D. C.	1489 Newton St.
†BARKSDALE, ALICE ASHTON (0)	D. C.	1752 Euclid St.
BARLOW, RUTH GERALDINE (0)	D. C.	1434 Q St.
BARROW, MARY GLADYS (0)	D. C.	1013½ I St. N. E.
BARTLETT, BARBARA ELIZABETH (6)	D. C.	1929 Lawrence St.
BASSECHES, JACOB THOMAS (91)	N. Y.	1814 Riggs Pl.
BAUER, EMMA BARBOUR (2)	Pa.	1235 Girard St.
BECKETT, EDGAR WELLS (21)	D. C.	710 Quincy St.
BEECH, ROZIER JAMES (0)	D. C.	1662 Park Road

BEHREND, HENRIETTA (42)	D. C.	Route A, Box 163, Anacostia Station
BELCHER, JOSEPH WARREN (0)	D. C.	178 U St. N.E.
†BENDER, LEO (0)	Md.	Silver Spring, Md.
BENFER, MARY CELIA (0)	D. C.	3009 17th St. N. E.
BENNETT, AVA L. (32)	Ohio	U. S. Nat. Museum
BENNETT, FLORENCE MABELLE (0)	D. C.	4411 Iowa Ave.
BENNETTS, ELLA MILDRED (87)	Wis.	1941 First St.
BENTLEY, HELEN E. (0)	N. Y.	I-K Bldg. Govt. Hotels
BERLINER, ALICE ELIZABETH (12)	D. C.	1458 Columbia Road
BERMAN, LOUIS H. (0)	D. C.	813 4½ St.
BERNSTEIN, SAMUEL (0)	D. C.	601 Second St. S. W.
BERRYMAN, FLORENCE SEVILLE (24)	D. C.	1754 Euclid St.
*BEULAR, MELBOURNE EARNEST (5)	Texas	1333 15th St.
BLAKE, NELSON MOREHOUSE (0)	Md.	Hyattsville, Md.
BLANTON, THOMAS LINDSAY, JR (0)	Texas	223 East Capitol St.
BLEIKER, ROSS FRANKLIN (40)	Mo.	2123 F. Street
BOARDMAN, LEONA (0)	Ohio	1220 North Carolina Ave.
*BOCKOVAC, JOSEPH LORENZ (0)	Md.	653 Pa. Ave. S. E.
BOHNE, EMIL F. (0)	Ind.	914 22nd St.
BOND, SAMUEL HAZEN (0)	D. C.	4525 Klinge St.
BONEBRAKE, HELEN L. (6)	D. C.	5210 Illinois Ave.
*BOSTWICK, ELMER PATTON (92)	Ohio	1803 G St.
*BOSWELL, MARGARET BRAINERD M.	D. C.	238 New Jersey Ave.
*BOUCHER, HIRAM A. (0)	Minn.	House Office Bldg.
BOUCHER, PAULINE E. (14)	D. C.	515 E. Wardman Courts
BOWEN, GEORGE LOVERIDGE (24)	Kans.	1829 19th St.
BOWEN, MARY ELIZABETH (0)	D. C.	1654 Hobart St.
BOX, MARY M. (34)	Texas	3737 Kanawha St.
		Chevy Chase, D. C.
BOYD, SUE HUNT (103)	N. C.	2006 G St.
*BOYD, VERNON JEROME FORD (0)	N. Dak.	612½ 22d St.
*BOYNTON, MARCIA (6)	Ohio	328 13th St. N. E.
BRADLEY, MARY M. (70)	Ga.	2311 Ontario Road
BRANNEN, FLORENCE (0)	Ga.	1337 Park Road
BRASELL, MARY LOUISE (73)	Miss.	1834 K St.
BRAZEROL, KATHERINE BEATRICE (15)	D. C.	1233 11th St.
BREUNINGER, MIRIAM ROBIN (30)	D. C.	5700 16th St.
BREWER, MARGARET GRANT (0)	Md.	College Park, Md.
BRIDGES, ILDRIA (31)	Ill.	1328 South Carolina Ave.
BROADDUS, ETTIENETTE H. (0)	Va.	Arlington, Va.
BROMBERG, JOHN LOUIS (17)	Ala.	Senate Office Bldg.
*BROWN, DESIRE (30)	Tenn.	1307 P St
BROWN, EARL (0)	D. C.	2033 F St.
BROWN, ERMA (57)	Mo.	Cavendish Apts.
*BROWN, ESTELLA E. (36)	Md.	3475 14th St.
BROWN, FRANCES ISABELLA (0)	D. C.	4606 15th St.
BROWN, LOIS (0)	Texas	714 18th St.
BROWN, WAGER SWAYNE (110)	D. C.	2827 28th St.
BROWNE, THOMAS (116)	D. C.	231 9th St. N. E.

*BROWNING, ELLA CAWTHORN (0)	Md.	1402 Delafield St.
BRUNER, KENNETH H. (0)	D. C.	519 Harvard St.
BRYAN, CAROLYN NAOMI (10)	D. C.	1906 Florida Ave.
*BRYANT, CHARLES ODELL (0)	Tenn.	606 22d St.
BUCHANAN, EVA REBECCA (57)	Iowa	1804 G St.
BUCKINGHAM, ETHEL R. (6)	D. C.	2570 University Pl.
BUCKINGHAM, WELLS SACKETT (0)	D. C.	The Portner
BURDICK, BERNARD FRANKLIN (10)	Ala.	1739 P St.
*BURG, ROBERT EDWARD (0)	D. C.	Soldier's Home Hospital
BURGESS, HARRIETT LENORE (0)	D. C.	1819 Hamlin St. N. E.
BURKINSHAW, THOMAS J. (0)	Conn.	The Marlborough 918 18th St.
BURRUS, JOHN W. (62)	N. C.	Y. M. C. A.
BURSLEY, HARRY C. (0)	D. C.	57 R St. N. E.
BURTON, OLIVER E. (39)	W. Va.	55 T St. N. E.
†BUTKIEWICZ, JOHN K. (122)	D. C.	1335 H St.
†BUTLER, CHARLES CLAUD (0)	D. C.	3435 Oakwood Terrace
†BUTLER, GEORGE HENRY (0)	N. Dak.	612½ 22d St.
BUTLER, MARION, JR. (39)	D. C.	2200 R St.
†BUZBEE, J. QUINTIN (94)	Ala.	112 3d St. N. E.
CABLER, CLEVELAND (130)	Ark.	1100 Vermont Ave.
CALL, ALDEN A. (0)	D. C.	3612 Newark St.
*CAMPBELL, KATHLEEN RAY (86)	Va.	The Concord
CAMPBELL, LOIS ELIZABETH (0)	Pa.	5611 14th St.
*CAMPBELL, RUTH L. (0)	Calif.	1820 K St.
CARLE, HERBERT M. (22)	Ohio	611 22d St.
CARR, ELMA BEBEE (106)	Ky.	Department of Labor
CARTMELL, LEON E. (85)	Miss.	502 B St. N. E.
CASTLE, WANDA R. (0)	Texas	1827 I St.
CATES, RONALD EDWARD (10)	Iowa	1739 P St.
CATHCART, PAUL HAMILTON (104)	Va.	Ballston, Va.
CERCEO, A. VICTOR (0)	D. C.	110 E St.
CHACE, MARJORIE (15)	D. C.	5300 Belt Rd., Chevy Chase, D. C.
†CHANDLER, ROBERT CARSWELL (0)	Ga.	2002 G St.
CHAPIN, MABEL HEATH (0)	D. C.	815 A St. N. E.
CHASTAIN, LOUIS P. (0)	D. C.	723 Carroll Ave., Takoma Park, D. C.
CHEEK, ELSIE CAROLYN (0)	D. C.	54 V St.
CHEYNEY, WILLIAM JAMES (69)	Va.	Rosslyn, Va.
CHURCH, EARLE R. (36)	Mich.	R. F. D., Silver Spring, Md.
CLARK, HELEN ANGELA (0)	D. C.	1818 Kalorama Rd.
CLARK, WALDO APPLETON (0)	D. C.	1778 Lanier Pl.
CLARKE, CORNELIA PHILLIPS (0)	Md.	Hyattsville, Md.
CLINE, ROBERT C. (0)	Va.	McLean, Va.
*CLOVER, NINA (0)	Okla.	1669 Columbia Rd.
COCHRAN, DORIS MABLE (100)	D. C.	2027 1st St.
*COHEN, ELIZABETH (0)	N. J.	2914 11th St.
COHEN, SAM J. (63)	D. C.	617 K St.
COLEMAN, DONALD GEORGE (85)	Kans.	1762 U St.
†COLFLESH, ROBERT W. (0)	Iowa	615, Y. M. C. A.
COMLEY, LORNE C. (0)	Va.	Cherrydale, Va.
CONLON, NORMAN A. (0)	D. C.	3540 11th St.

COOPERMAN, HATTIE (68)	Iowa	2510 M St.
CORN, HERBERT FREDERICK (0)	Ill.	1100 Vermont Ave.
*COSTELLO, MARY E. C. (0)	N. Y.	117 R St.
COTTRELL, CASPER LEHMAN (101)	Pa.	2140 G St.
COUGHLIN, ELVA E. (84)	D. C.	5346 41st St., Chevy Chase, D. C.
COYNE, GLADYS DALE (0)	Ind.	The Monmouth
*CRAIGHEAD, RUTH H. (0)	Mass.	1849 Mintwood Pl.
CRATON, MARGARET ELIZABETH (0)	D. C.	1410 Girard St.
†CRAWFORD, MARVIN (0)	Miss.	318 B St. S. E.
CROGGON, WILLIAM NEWTON (13)	D. C.	1460 Newton St.
CROMER, KENNETH (6)	Va.	1218 11th St.
†CROSS, IDA CHACE (0)	Mass.	709 Shepherd St.
*CUDDIHY, M. ISADORE (0)	Mich.	Colorado Apts.
†CUMMINGS, FLORENCE (103)	D. C.	1333 Valley Pl. S. E.
*CUTTS, LAURA LOUISE (78)	Wash.	1723 35th St.
DAHL, ANNA (0)	Iowa	624 H St.
DAHL, MYRA (0)	Iowa	624 H St.
DAKE, LUCY RAMONA (0)	Va.	Cherrydale, Va.
DANIEL, JULIA IRENE (80)	D. C.	512 Randolph St.
DARBY, ROY L. (0)	Iowa	523 Shepherd St.
DAVIS, GRAHAM LEE (0)	N. C.	Y. M. C. A.
†DAY, HELEN MARIE (0)	D. C.	2014 North Capitol St.
DEAN, MINNIE F. (2)	D. C.	1778 Lanier Pl.
DEAN, WAIVA A. (44)	Oreg.	1937 Park Rd.
DEBRODES, PAULINE (0)	D. C.	The Portner
DEFREES, RAYMOND G. (114)	Iowa	2425 North Capitol St.
DEGRANGE, FRANCES E. (0)	D. C.	25 U St. N. E.
DEJERSEY, VIOLET L. (0)	Mo.	1342 Vermont Ave.
DEMENT, CHARLES WILLIAM (12)	D. C.	1348 Parkwood Pl.
*DENTON, DOTTIE ADELE (0)	Tenn.	1531 Vermont Ave.
DICKEY, FREDERICK MORSE (81)	Pa.	1441 Pennsylvania Ave. S. E.
DIX, ORILEE ELIZABETH (16)	D. C.	3328 O St.
DODEK, SAMUEL MAYER (0)	D. C.	1360 Spring Rd.
DOKE, LULA C. (6)	D. C.	1824 G St.
DONLEAVY, MARY AGNES (0)	Vt.	1524 L St.
DOYLE, BLANCHE GLEASON (0)	D. C.	4901 13th St.
DROWN, MARION JULIA (30)	D. C.	1027 12th St.
DUBOSE, WILLIAM J. (14)	D. C.	1850 Kalorama Rd.
DUGGAN, JAMES HENRY (0)	Ga.	1108 13th St.
*DUNAGAN, LAURA L. (0)	Ga.	2118 O St.
*DUVALL, ELIZABETH VAN HORN (0)	D. C.	304 9th St. N. E.
EARNEST, ELIZABETH (30)	D. C.	2123 N St.
EARNEST, JOHN PAUL, JR. (91)	D. C.	2123 N St.
EARNSHAW, ELEANORE ALLISON (61)	D. C.	224 8th St. S. E.
EARNSHAW, SAMUEL WILSON (15)	D. C.	224 8th St. S. E.
EBLING, SAMUEL GALE (105)	Ohio	2127 G St.
ECKEL, ARTHUR FREDERICK (22)	Ill.	Bureau of Standards
ECKERT, ESTHER AGNES (6)	D. C.	3042 Newark St.
*EDGERTON, DAISY (0)	D. C.	1016 Massachusetts Ave.
EDMONDS, RALPH MILO (0)	D. C.	1904 Jackson St. N. E.
EDWARDS, MARION J. (0)	D. C.	118 14th St.
*EHRET, RUTH G. (0)	N. J.	X-Y Bldg., Govt. Hotels
EINSTEIN, MAY BLANCHE (101)	D. C.	619 19th St.

ELDRIDGE, FRANK R., JR. (21)	D. C.	218 Park Ave., Takoma Park, D. C.
ELLIOTT, EDWIN BOYD (0)	D. C.	3708 Oliver St.
ELLIOTT, JOHN PLUMMER (0)	Md.	1843 Calvert St.
ELLIS, JAMES F. (0)	Ala.	24 Grant Pl.
ELLIS, LEE E. (0)	Ala.	24 Grant Pl.
*ELMQUIST, JEAN GEMMEL (64)	D. C.	2844 Wisconsin Ave.
ELY, MARY HANFORD (0)	Pa.	1720 H St.
*ENGELBERT, ARCHIBALD L. (0)	Wis.	Camp Humphreys, Va.
*ENYART, ALTA MARIE (20)	D. C.	2120 G St.
†ERBACH, AMALIA MARIE (0)	D. C.	713 Massachusetts Ave. N. E.
ERIKSON, BERNHARD E. (104)	Ill.	2112 F St.
George Washington University, D. D. S., 1919		
ESPEY, ANNA LOUISE (0)	D. C.	2010 1st St.
EVANS, ROSE E. (0)	Pa.	Vandling, Pa.
FALLS, CHARLES D. (0)	Ind.	1858 Mintwood Pl.
FARRELL, THOMAS FRANCIS (24)	Mass.	1908 H St.
FENTON, ANNA B. (0)	Nebr.	1306 Girard St.
†FLAHERTY, PAUL (0)	Mass.	1762 N St.
FLISHER, LEONORA V. (0)	N. Y.	721 19th St.
FOLSE, LENARD ROY (0)	La.	2013 G St.
FONDERSMITH, RALPH W. (0)	Ind.	2123 F St.
FORD, JULIA LOUISE (12)	D. C.	328 11th St. N. E.
FOSTER, B. S., JR. (0)	D. C.	2034 F St.
FOSTER, MARGARET E. (0)	Md.	Glen Echo Heights, Md.
FRAKER, BESSIE EVA (0)	Tenn.	1124 12th St.
FREEDMAN, ALEXANDER (0)	D. C.	3128 19th St.
*FREEMAN, SUSAN ELIZABETH (0)	N. C.	1018 14th St.
*FREIL, GERTRUDE GABRIEL (0)	N. Y.	190, S. W. & N. Bldg.
FREY, JOHN CHARLES (29)	Ind.	Y. M. C. A.
FROST, BEULAH MALVINA (30)	Minn.	1725 T St.
FUNK, CLARA LINN (0)	Ky.	115 S St.
*GALLOWAY, RALPH E. (100)	Va.	Walter Reed Hospital
GARDNER, ALLEN HOWARD (0)	Penn.	1421 Buchanan St.
*GARDNER, BERYL G. (0)	Penn.	515 Rock Creek Church Rd.
GARNETT, JOSEPH F. (0)	Ky.	1533 15th St.
GEITNER, FRANCES ROYER (0)	N. C.	1401 Massachusetts Ave.
*GEORGE, MARY VINCENT (12)	D. C.	513 East Capitol St.
GERRY, MARJORIE S. (0)	D. C.	2944 Macomb St.
GESCHICKTER, CHARLES (86)	D. C.	1222 Connecticut Ave.
GESSFORD, ELEANOR (0)	D. C.	3123 13th St.
GILLIGAN, WILLIAM (80)	Conn.	2023 G St.
GIRDNER, WILLIAM WALDO (0)	D. C.	6812 Laurel Ave., Takoma Park, D. C.
GIRTS, MAXINE LUCILE (0)	Penn.	1434 Harvard St.
†GLADSTONE, JOSEPH MARION (24)	D. C.	308 East Capitol St.
*GLADSTONE, NEWTON ABEL (0)	D. C.	1748 8th St.
GLASSFORD, MARY C. (0)	D. C.	3639 13th St.
*GLAZAT, VIOLA F. (0)	Mich.	918 M St.
GLENN, DAISY MARIE (9)	Wyo.	The Gordon
GLUCK, SOL S. (110)	Wis.	1322 12th St.
GODBOLD, ALBEA (31)	Miss.	Bu. of Labor Statistics
GODFREY, CLARENCE MORTIMER (68)	D. C.	915 14th St. S. E.
GOFORTH, ALYS M. (2)	La.	2 D St. S. E.

GOODRICH, LLEWELLYN L. (0)	Mo.	201 I St.
GORDON, ISIDOR (0)	Md.	Riverdale, Md.
GRACE, ELIZABETH (0)	Ala.	720 4th St. N. E.
†GRANGER, ELIZABETH M. (0)	Mo.	3722 New Hampshire Ave.
*GRAS, BEULAH M. (0)	Iowa	20th and P Sts.
GRASS, EDWARD JACOB (0)	D. C.	2024 I St.
†GRAVATT, FRANCES E. (100)	Md.	5 Leland St. Chevy Chase, Md.
GREENE, LEMUEL E. (101)	La.	2715 14th St.
*GREGG, ALEXANDER WHITE (101)	Texas	1333 15th St.
GROCK, NELLIE HAZEL (0)	D. C.	Takoma Park, D. C.
GRONNA, ARTHUR J. (62)	N. Dak.	2219 California St.
GRUNWELL, MARY ELIZABETH (0)	Md.	924 23d St.
GUILFORD, ANNE E. (51)	D. C.	401 D St.
HADDAWAY, KLEIN KINZER (91)	Md.	2504 Garrison Ave. Baltimore, Md.
HADDEN, HELEN FRANCES (10)	Md.	17 Grafton St. Chevy Chase, Md.
*HAFFLY, EDITH (0)	Pa.	1035 Lamont St.
HAGAN, JONATHAN FOSTER (15)	Va.	Ballston, Va.
HALDERMAN, DANIEL LUTHER (0)	Penn.	2040 F St.
†HALL, THERESA (0)	Ky.	219 East Capitol St.
HANNA, ANITA BELLE (73)	Ind.	1202 18th St.
HANNA, MARK (0)	Ind.	1333 15th St.
HANSON, EDWARD J. (42)	N. C.	1333 15th St.
HARDY, MAX (54)	Colo.	429 New Jersey Ave.
*†HARLIN, RUTH E. (0)	Minn.	309 A St. S. E.
HARLOW, W. FRANK (0)	Md.	Brentwood, Md.
†HARRIS, SAMUEL BEVERIDGE (0)	D. C.	Y. M. C. A.
*†HARRISON, FORREST MARTIN (60)	D. C.	1705 Kenyon St.
M. D., 1914, George Washington University		
HARVEY, ROSAMOND FRANCES (88)	D. C.	2007 F St.
*HARVEY, WILLIAM MCKENZIE (9)	D. C.	Kenilworth, D. C.
HASTINGS, GEORGE S. (68)	D. C.	3600 Ordway St.
*HATCHER, JAMES C. (24)	Ala.	1907 G St.
HAWORTH, ELLIS (0)	D. C.	132 13th St. S. E.
HAYES, ARTHUR WALKER (25)	D. C.	3558 16th St.
HAYNES, WILLIAM PRESTON (60)	Va.	Alexandria, Va.
HAYS, CATHRYN MARY (0)	Mo.	1340 Fairmont St.
HAZELL, JOSEPH W. (33)	D. C.	1339 K St.
†HEDDEN, RUTH MARIE (49)	D. C.	1908 Belmont Rd.
*HELMICK, DOROTHY P. (0)	D. C.	5411 Illinois Ave.
HENDERSON, EDWARD PORTER (0)	Ohio	Marine Headquarters
HENDON, ROBERT R., JR. (55)	Okla.	1843 Calvert St.
HENRY, LULA (16)	D. C.	1919 K St.
*HENSHALL, LAWRENCE DECKER (14)	Penn.	1333 15th St.

HERBST, MILDRED LOUISE (30)	D. C.	1032 25th St.
HERSEY, SAMUEL		
FREEMAN (106)	Iowa	105 D St. N. E.
HICKS, ARTHUR J. (30)	Mich.	433 Q St.
HILL, HAZEL RAE (0)	Md.	408 3d St.
HILL, IRA B. (17)	N. C.	1025 G St. N. E.
HILTON, OLIN LLOYD (0)	Ala.	1751 P St.
HINEMON, EUGENIA (0)	D. C.	1717 35th St.
HOBBS, DOROTHY F. (0)	D. C.	3705 24th St.
*HOBBS, PAULINE BOWEN (61)	D. C.	The Beacon
HOCKER, FRANCES W. (0)	Penn.	22 2d St. N. E.
HOFFMAN, HERMAN S. (37)	Md.	Brentwood, Md.
HOGG, SARA (103)	Ga.	1401 Columbia Rd.
HOLLIS, LAWRENCE COE (14)	Va.	1218 11th St.
HOLMAN, JESSE NEIL (0)	Ala.	147, House Office Bldg.
HOLMES, OLIVER W. (9)	D. C.	830 Otis Pl.
HOLMES, RUTH EMILY		
VIRGINIA (0)	Md.	Rockville, Md.
HOPKINS, JOY (67)	Va.	7106 Piney Branch Rd.
*HORN, GLADYS W. (0)	N. J.	1333 Fairmont St.
†HORNADAY, FRED E. (0)	D. C.	1419 Newton St.
HORWITZ, ALEC (90)	D. C.	916 4½ St. S. W.
HOSFORD, HELEN R. (54)	Iowa	606 Quincy St.
HOUSTON, MARY		
JOSEPHINE (0)	D. C.	1750 S St.
HOWARD, DEANE CHILDS (70)	D. C.	1801 16th St.
HOWELL, HERBERT E. (0)	Mich.	34 T St.
HOWELL, JOSEPH ADAMS (0)	Ala.	224 1st St.
HUDSON, FRANCES M. (0)	Mo.	1024 Vermont Ave.
HUFF, CHARLES R. (66)	Minn.	1916 16th St.
†HUNSICKER, ANNA PEARL (45)	Ind.	1919 G St.
†HUNT, ADA M. (63)	D. C.	2727 Ontario Rd.
HURLEY, FITZHUGH L. (0)	N. C.	Y. M. C. A.
HUSE, FAY IRENE (93)	Mont.	Wardman Park Inn
HYMAN, SADIE ZUNSNER (61)	D. C.	3401 16th St.
JACKSON, LAWRENCE		
OSCAR (112)	Colo.	17 T St. N. E.
JACKSON, WILLIAM ISAAC (56)	Ill.	Y. M. C. A.
*JACOBS, MARY E. (0)	Wis.	1473 Harvard St.
JACOBS, MERLIN EDWIN (0)	D. C.	517 L St.
JACOBSON, ROBERT LOUIS (0)	Wis.	2030 G St.
JOHNSON, ALVA H. (0)	Mich.	1310 Delafield Pl.
*JOHNSON, BEULAH A. (0)	Wis.	1104 M St.
JOHNSON, EDWARD H. (20)	Texas	32 G St. S. W.
JOHNSON, ETHEL MAY (58)	Penn.	1207 Emerson St.
JOHNSON, LESTER WYLIE (0)	Ill.	309 New Jersey Ave.
*JOHNSON, MARSHALL		
HARRISON (0)	La.	3106 Mt. Pleasant St.
JOHNSON, RUSSELL M. (0)	Minn.	1100 Vermont Ave
JOHNSON, WILLIAM JOSEPH (0)	Mass.	232 1st St. S. E.
JOHNSON, YEDA (36)	Ky.	5100 14th St.
JOHNSTON, FRANCIS E. (76)	Va.	Alexandria, Va.
JOHNSTON, KENNETH A. (23)	D. C.	The Kenyon
JONES, EVELYN WELLINGTON (33)	D. C.	3719 Keokuk St.
JONES, FRANCIS MARION (46)	D. C.	The Kenyon
JONES, MINNIE (30)	D. C.	122 D St. S. E.
JUDD, ELEANOR C. (28)	D. C.	Monmouth Hotel

JUDGE, ANASTASIA G. (0)	D. C.	116 V St. N. E.
KALUPY, HARRY HAROLD (67)	La.	2020 G St.
KAPLOVITZ, REBECCA (46)	N. J.	1336 Newton St. N. E.
KAR, A. KENNETH (0)	D. C.	2622 11th St.
KEEGIN, S. WARWICK (0)	D. C.	1704 Lamont St.
*KEENER, U. GRANT (8)	Okla.	1333 15th St.
KEISER, CLARENCE CYRUS (6)	Md.	Bethesda, Md.
KELL, GERTRUDE C. (0)	Kan.	1116 Vermont Ave.
†KELLOGG, GRACE ELIZABETH (0)	D. C.	36 Rhode Island Ave. N. E.
KELLY, HOMER BLAINE (95)	Mass.	Fontanet Courts
KELLY, RICHARD		
ALEXANDER (122)	Va.	1312 Fairmont St.
KELSEY, BERNICE (0)	D. C.	1712 Allison St.
KENNEDY, LILLIAN		
ELIZABETH (0)	Mo.	105 5th St. N. E.
KENNEY, MARY BRYAN (0)	Del.	2031 F St.
*KERIG, FLORENCE DWAN (0)	Mass.	1800 I St.
KINCAID, CALVIN B. (0)	Tenn.	630 Keefer Place
*†KING, STELLA M. (0)	D. C.	819 Kennedy St.
KINGSBURY, DOROTHY E. (6)	Mich.	17 Adams St.
KLING, MARGARET AIMEE (0)	Ill.	Monmouth Hotel
†KNAPP, ARTHUR LYMAN (0)	D. C.	714 Rock Creek Church Rd.
KRAUSE, LAURA MAGDALENA (0)	Nebr.	641 Maryland Ave. N. E.
KUNKEL, RUTH LEE (0)	D. C.	2510 Wisconsin Ave.
†LACEY, ANNA JANNETTE (0)	Md.	Washington Grove, Md.
LADD, DOROTHY DEVEREAUX (0)	Md.	6109 Brookville Rd.
		Chevy Chase, Md.
LA MOORE, PARKER (0)	N. Dak.	213 4th St.
LANDERS, MARY J. (0)	Ill.	1750 S St.
†LANE, ELEANOR (70)	D. C.	2906 H St.
LANE, RUSSELL C. (0)	N. Y.	819 19th St.
*LANGIN, JAMES J. (0)	Iowa	1719 G St.
LARSON, SWAN ALFRED (52)	Minn.	2130 O St.
LAW, THOMAS WILBUR (0)	Fla.	1354 Fairmont St.
LAZARO, HELOISE (79)	La.	Falkstone Courts
LEE, AGNES IRENE (36)	D. C.	327 10th St. N. E.
†LEE, ELIZABETH L. (0)	D. C.	2818 13th St. N. W.
LEEDY, NELLIE GRACE (3)	Mo.	201 East Capitol St.
LEIDEN, CYRIL E. (0)	Pa.	1120 13th St.
LESTER, M. MARY (72)	Va.	2114 G St.
LEWIS, STUART (—)	Ill.	1100 Vermont Ave.
*LIDE, LEWIS MAXWELL (138)	D. C.	219 14½ St. N. E.
LINDOW, OSCAR H. (85)	Wis.	513 22d St.
LINDSAY, FRED H. (0)	Okla.	504 F St. N. E.
LITTELL, NELSON (99)	Ind.	3149 Mt. Pleasant St.
LITTLE, DONALD (0)	Kansas	House Office Bldg.
LITTLEHALES, GEORGE		
REBER (15)	D. C.	2132 Le Roy Place
LONG, FLORENCE ADELAIDE (0)	Va.	526 Queen St., Alexandria. Va.
LONG, GEORGIA A. (0)	D. C.	124 R St. N. E.
†LONG, WILLIAM RODNEY (0)	Mass.	1762 M St. N. W.
LORD, ISAAC QUACKENBUSH (0)	D. C.	1336 Newton St. N. E.
LOUIS, MAX C. (34)	D. C.	47 Quincy Place N. E.
LOVE, DOUGLAS WILDING (0)	Utah	1439 Rhode Island Ave.
LUDLOW, MARJORIE (0)	D. C.	1908 Q St.
†LUNDSTROM, FRANK O. (94)	Colo.	231 E St.
LYON, QUINTER MARCELLUS (84)	D. C.	636 S. Carolina Ave. S. E.

McCABE, WILLIAM L. (0)	Utah	2622 11th St.
McCASLIN, FRANK E. (0)	Minn.	1801 G St.
McCAULEY, KATHERINE CHRISTINE (0)	D. C.	1353 Maple View Pl. S. E.
McCHESNSY, FRANK MARKS (70)	D. C.	129 Randolph Pl.
McCLINTOCK, LAURA MADELINE (80)	Pa.	The Octavia
McCLURG, ALICE (0)	Ind.	1527 O St.
McCOLLUM, RUTH (0)	S. Dak.	931 K St.
McCORMICK, JUSTINE LUCILLE (0)	Ind.	5408 9th St.
McCoy, HAROLD D. (0)	Wis.	30 Elm Ave. Takoma Park, D. C.
†McCoy, WILLIAM F. (0)	D. C.	1916 16th St.
McCULLOUGH, M. RUTH (0)	Pa.	1419 Columbia Rd.
†McDANNEL, LUCY CHURCHILL (0)	D. C.	Wardman Park Hotel
McELROY, CATHERINE FRANCES (0)	Mass.	3400 Macomb St.
McGrew, MARTHA STEELE (82)	Tenn.	1363 Fairmont St.
McINTYRE, JOSEPH D. (38)	D. C.	2209 M St.
McKENDREE, LAURETTE (44)	D. C.	1807 Riggs Place
McKENZIE, DORIS (61)	D. C.	2118 F St.
†McKoy, FRANCIS K. (62)	N. C.	2029 H St. N. W.
McMILLAN, FRANCES LUCILLE (98)	Tenn.	3815 14th St.
McNEILL, MARVIN C. (0)	Ill.	Y. M. C. A.
McNITT, H. ARNOLD (0)	Md.	Berwyn, Md.
McNITT, H. J. RUSSELL (0)	Md.	Berwyn, Md.
*McPHERSON, JOE FRANCIS (0)	Mo.	House Office Bldg.
McPHERSON, JOHN VERNON (0)	Mo.	House Office Bldg.
*McQUILKIN, MARGARET M. (0)	Ill.	5413 Illinois Ave.
MAGUE, ROSCOE EDWIN (36)	Mass.	1603 G St. S. E.
MALONE, LILLIAN (60)	Va.	408 Duke St., Alexandria, Va.
MANKEY, HELEN LAURA (30)	D. C.	2914 11th St.
MANNING, THOMAS RAY (114)	Pa.	22 2d St. N. E.
MANNING, VANNOY H., JR. (0)	D. C.	3602 Newark St.
MARKLEY, MAY ADELLE (39)	D. C.	136 F St. S. E.
MARKRITER, FRANK B. (0)	D. C.	1758 U St.
MARTINSON, DETLOW M. (100)	D. C.	Theta Delta Chi House
†MARTINEZ, MERCEDES (61)	P. R.	1224 13th St.
*MARVIN, ROBERT WALDO (0)	D. C.	324 Taylor St.
MASON, JOHN RUSSELL (18)	D. C.	808 9th St. N. E.
MASSEY, LINTON REYNOLDS (3)	D. C.	1844 Kenyon St.
MASSEY, MARK F. (0)	Kansas	918 23d St.
*MATHENY, MARY F. (0)	Texas	338 Maryland Ave. N. E.
MAUL, SARAH ELIZABETH (78)	D. C.	Hyattsville, Md.
*MAUPIN, HARRY DOMER (0)	D. C.	1420 Longfellow St.
MAY, RUTH ELIZABETH (9)	Md.	Berwyn, Md.
MEHLIG, MAY O'ROURKE (0)	D. C.	1726 Mass Ave.
MELOON, IVY CARMEN (89)	Mass.	V-W Bldg. Govt. Hotels.
MERDIAN, BERTHA (0)	Ill.	324 5th St. S. E.
MERRICK, MANILA C. (6)	Iowa	1017 12th St.
MERRILL, LOTTIE (0)	N. Y.	1531 Vermont Ave.
MERRIMAN, ERVIN EUGENE (51)	Ind.	400 M St. N. E.
MESSER, AGNES HENDERSON (0)	D. C.	3504 Macomb St.
MIETZEROTT, GERTRUDE (89)	D. C.	The Northumberland

METZEROTH, MARGARET (64)	D. C.	119 12th St. S. E.
MIKESKA, ROSALIE (46)	Texas	10 New York Ave.
MILLER, NELSON A. (0)	D. C.	1836 North Capitol St.
MILLER, PHILIP (0)	N. Y.	1103 9th St.
MILLS, AGNES J. (3)	Colo.	1337 Park Road
MILLS, EDDIE LANCE (102)	Texas	2421 Penn. Ave.
MILLS, HELENA JANE (0)	Md.	R-S Bldg, Govt. Hotels
MINER, HELEN (108)	Ohio	1613 Irving St.
*MITCHELL, HAROLD E. (0)	D. C.	7 Melrose St. Chevy Chase, D. C.
MITCHELL, HARRIETTE (0)	Mo.	2400 16th St.
MONCURE, ELIZA M. (0)	D. C.	Woodworth Apts.
MONDELL, DOROTHY (45)	Wyo.	2110 O St.
MONTGOMERY, ELSIE M. (0)	D. C.	3302 N St.
MONTGOMERY, JIMMIE ETHEL (104)	Ala.	3459 Holmead Pl.
MOORE, MARGARET M. (20)	Mo.	101 North Carolina Ave. S. E.
MOORE, MILDRED JOSEPHINE (95)	D. C.	111 Tenn. Ave. N. E.
MOORE, MYRTLE E. (0)	Texas	215 9th St. S. W.
MOREHOUSE, MORTIMER BRYAN (34)	D. C.	1526 O St.
MORRELL, FOSTER (0)	Ohio	4729 13th St.
*MORRISON, RALPH LANCASTER (0)	Md.	1335 H St.
MORROW, CLARA ALLEN (40)	D. C.	Wardman Park Inn.
MORSE, MARY E. (0)	N. Y.	808 Upshur St.
MOSKIVITZ, ADOLPH (63)	D. C.	1329 S St.
MOTTERN, ALBERT JOSEPH (58)	Ohio	2517 Wisconsin Ave.
MOULTON, EDWARD B. (0)	Ill.	1419 Girard St.
*MUDGEIT, ROBERT S. (0)	Mich.	1219 Delafield Place
*MUNCHEY, ARIANA (0)	Fla.	56 Seaton Place
MUNTER, GODFREY LEON (102)	Ill.	Swiss Legation
*MURRAY, ANNA (0)	D. C.	1317 Farragut St.
MUSSMAN, MICHAEL ANGELO (0)	Pa.	438 H St.
*MYERS, FRANK HAMMETT (30)	D. C.	3754 McKinley St.
NALL, ARTHUR ERNEST (2)	Texas	1333 15th St.
†NAYLOR, ESTILL ESS (62)	Mo.	1736 G St.
NELMS, HENNING CUNNINGHAM (94)	D. C.	1121 12th St.
NELSON, AGNES CHRISTINE (91)	N. Dak.	2524 17th St.
NEWMAN, HARRY WRIGHT (44)	D. C.	1739 P Street
NEWMAN, LINN ALBERTA (28)	Ind.	House Office Bldg.
NEWMAN, RAYMOND W. (0)	Calif.	Bureau Animal Industry
NICHOLS, HENRY JANNEY (109)	D. C.	1842 Calvert St.
*NYE, CLARE BRELM (0)	D. C.	23 V St. N. E.
NYREN, PHILIP (0)	Wash.	713 21st St.
OVERG, NANCY E. (0)	Pa.	236 L-M Bldg. Govt. Hotel
*OLIVER, FRED NASH (118)	Texas	Walter Reed Hospital
*PABST, HELEN GERTRUDE (30)	D. C.	4622 15th St.
†PACKER, EARL L. (36)	Iowa	1523 L St.
PADGETT, MILDRED (100)	D. C.	1726 Euclid St.
*PAGE, NANNIE TYLER (0)	D. C.	220 Wootton Ave. Chevy Chase Station
PALMER, J. JOSEPH W. (0)	D. C.	84 V St.
PALOMAR, GAUDIOSO P (0)	D. C.	Alabama Apts.
PARHAM, JULIA A. (—)	Texas	2112 F St.

PAULUCCI, JOSEPH W. (0)	Ohio	Walter Reed Hospital
PAZOUR, MARIE (24)	S. Dak.	1520 P St.
PEARSON, ESSIE LEE (0)	D. C.	22 Channing St.
PERLIN, HARRY (100)	Conn.	2219 H St.
PERLSTEIN, SAMUEL (0)	D. C.	105 6th St.
PERROTT, DOROTHY (0)	N. Dak.	1311 P St.
PERRY, IRENE ERSKINE (0)	Fla.	1414 16th St.
*PESSIN, JOSEPH (0)	Iowa	434 10th St.
PETERSON, CAROLINE E. (0)	Calif.	Bureau Medicine and Surgery Navy Dept.
PETERSON, CHARLES FREDERICK (37)	Md.	U. S. Capitol Police
PETERSON, MABEL E. (0)	N. Dak.	1357 Montague St.
PETERSON, ROBERT K. (0)	Va.	Lenox Apts.
†PETERSON, WILLIAM WALTER (43)	D. C.	1919 Calvert St.
PHELPS, ROSE B. (8)	Mich.	2141 K St.
PHILLIPS, RUTH SUTHERLAND (96)	D. C.	87 Eastern Ave. Takoma Park, D. C.
PHILLIPS, SHELBY C. (24)	D. C.	1357 Girard St.
PHOEBUS, GLADYS EDITH (44)	D. C.	1925 North Capitol St.
PICKERING, GRACE (0)	Ind.	The Toronto
PITCHER, LOIS (35)	D. C.	3910 McKinley St.
POLLNER, NONA BETTE (98)	D. C.	3200 Park Place
POPE, DARWIN JESSE (85)	D. C.	3214 Newark St.
POPE, GLADYS ANNA (0)	D. C.	3214 Newark St.
PORTER, BESSIE J. (11)	Neb.	1128 New Hamp. Ave.
†PORTER, GEORGE BOUTIN (0)	D. C.	1601 31st St.
†PORTER, RAYMOND W. (0)	Okla.	Glen Echo, Md.
POWELL, MARY LOUISE (24)	D. C.	628 6th St. N. E.
PREINKERT, MARGARET MARIE (77)	D. C.	1511 L St.
PRESCOTT, OLIVE (63)	D. C.	The Burlington
PROBEY, THOMAS F. (84)	D. C.	3158 O St.
PROTAS, MAURICE (56)	D. C.	1314 13th St.
PULLIAM, ROBERT W. (6)	N. C.	1419 Chapin St.
PUSEY, ELMER M. (6)	D. C.	127 T St.
PUTNAM, AMY D. (0)	N. J.	3033 15th St.
*QUINN, HERBERT E. (0)	Texas	71 New York Ave.
RAMSEY, ELIZABETH RUTH (0)	Va.	Rosslyn, Va., R. F. D.
RAMSEY, MARGARET C. (0)	D. C.	813 Mass. Ave. N. E.
RANCK, JAMES BYRNE (71)	D. C.	1405 15th St.
RAYMOND, DOROTHY GEORGE (0)	D. C.	1501 Harvard St.
REDINGER, CARL CHALMERS (0)	W. Va.	2102 N St.
REED, FRED CASSIUS (12)	D. C.	804 17th St.
REED, MABEL C. (0)	D. C.	1922 1st St. N. E.
REED, PAUL CLINTON (15)	La.	House Office Bldg.
REESE, WILLIAM E. (18)	D. C.	1826 M St.
*REEVES, GEORGE TORREYSON (110)	Va.	Ballston, Va.
REGAN, RUTH (0)	Minn.	1425 Harvard St.
REID, NEAL EWART (0)	N. Dak.	213 4th St. S. E.
REINROTH, JOHN FRANKLIN (37)	Ill.	2128 H St.
REITZEL, ALBERT EMMET (105)	N. C.	1311 L St.
*RELF, DOROTHEA LIVINGSTON (0)	D. C.	3427 14th St.

REYNOLDS, OLIVE AMRITA (90)	D. C.	503 River Road Chevy Chase, D. C.
†RHODES, MARION BENJAMIN (68)	Mo.	1627 19th St.
RICHARDS, MIRIAM GREY (6)	Md.	9 West Irving St., Chevy Chase, Md.
RICHARDSON, MARY HUME (0)	D. C.	132 East Capitol St.
RIGGS, FLORENCE M. (0)	N. Y.	308 Second St. N. E.
ROACH, JESSIE D. (0)	Ill.	2633 Adams Mill Rd.
ROBB, SEYMOUR (0)	D. C.	1131 7th St. N. E.
ROBERTS, EDNA JANE (0)	D. C.	P-Q Bldg, Government Hotels
ROBERTS, MARY C. (0)	Ohio	1434 Q St.
*ROBINSON, HARRY H. JR., (0)	Fla.	Y. M. C. A.
ROBINSON, MARY ANN (0)	Miss.	728 3d St.
ROBSIAN, DAISY S. (0)	Ky.	106 C St. S. E.
RODRIGUEZ, HARRIS J. (0)	La.	2006 F St.
ROGERS, SAM LYLE, JR. (0)	N. C.	3610 Macomb St.
ROONEY, WILLIAM FRANCIS (21)	Mass.	729 20th St.
RORER, JULIA H. (0)	D. C.	1800 K St.
ROSENBUSCH, LLOYD A. (0)	D. C.	3336 P St.
ROSINSKI, GERTRUDE L. (0)	D. C.	1216 K St.
ROWAN, BLANCHE (0)	Iowa	1410 11th St.
ROWE, JAMES M. (0)	D. C.	1401 Columbia Road
ROWLAND, MITTIE ELSTON (24)	Tenn.	Cherrydale, Va.
ROWLEY, FRANK SMITHERS (0)	D. C.	616 Harvard St.
ROYER, JOSEPH PAUL (17)	Ohio	1500 20th St.
RUDDIMAN, MINNETTE HONNER (0)	D. C.	1647 Lamont St.
*RUMMEL, ALICE L. (0)	Pa.	2117 O St.
*RYAN, EDWARD THOMAS (15)	Conn.	1811 G St.
RYAN, FLORENCE L. (0)	Ind.	919 18th St.
RYAN, RICHARD L. (0)	D. C.	1215 Euclid St.
*SAGE, LORETTA F. (0)	Mich.	The Octavia
SANDBORN, ELIZABETH (108)	Kansas	1526 O Street
*SAPP, CLARA P. (0)	Kansas	1007 Mass Ave.
SAVAGE, ROBERT LEE (0)	D. C.	712 Upshur St.
SAWYER, VERA C. (0)	N. Y.	127 Rock Creek Church Rd.
SCHAAF, MARTHA ELIZABETH, (94)	D. C.	1824 Monroe St.
SCHAUWEKER, MILDRED MIRIAM (129)	Ohio	1873 California St.
SCHELLFEFFER, FRANK (107)	Ill.	1108 N. H. Ave.
*SCHERKENBACH, GERTRUDE M. (0)	Minn.	1022 Vermont Ave.
SCHUEFLER, EDWARD LIPPARDT (21)	D. C.	428½ M St.
SCHLOBOHM, OTTO A. (0)	N. Y.	National Press Club
*SCHLUP, LESTER S. (0)	Ohio	915 16th St.
SCHOENFELDER, HELENA DOROTHEA (0)	Iowa	Mt. Rainier, Md.
SCHOFFSTALL, CHARLES WARREN (52)	Pa.	1829 19th St.
*SCHROEDER, ARNOLD H. (0)	Ind.	1311 M St.
SCHWARTZ, MARION E.	D. C.	2414 12th St. N. E.
SCHWARTZ, WILLIAM WARNER (0)	Mo.	1412 G St. S. E.
SCOTT, CHARLES CARLYSLE (42)	Ill.	1333 15th St.
*SCOTT, MARGARET E. (0)	D. C.	702 20th St.

SCOTT, RALPH S. (93)	Md.	Hyattsville, Md.
SEE, ERNEST A. (86)	W. Va.	1739 P St.
SHAFFER, ANNA LEE, (0)	Ill.	310 3d St.
†SHAFFER, HENRY MORSE (0)	D. C.	3437 Oakwood Terrace
†SHEA, EARL CLIFFORD (73)	S. Dak.	1321 Delafield Pl.
SHEA, JAMES W. (15)	D. C.	4427 Iowa Ave.
SHEA, MARGARET A. (0)	Ind.	1709 M St.
SHERIFF, GEORGE ROTHWELL (21)	D. C.	1462 Newton St.
SHISLER, GEORGE (63)	W. Va.	Walter Reed Hospital
*SHOWALTER, JOHN B. (0)	D. C.	1627 19th St.
SIEGLER, CATHERINE ESTELLE (0)	Md.	Tulip and Oak Aves., Takoma Park, Md.
†SILVERMAN, ROSE CLAIRE (0)	D. C.	312 11th St. S. E.
†SIMMONS, RUSH NELSON (23)	Minn.	1415 Rhode Island Ave.
SIMMONS, WILLIAM V. (21)	Miss.	109 Maryland Ave. N. E.
SIMON, DAVID ROBERT (0)	D. C.	2802 Cathedral Ave.
SIMS, EULA M. (0)	Texas	5100 14th St.
*SITLER, JEANETTE (0)	D. C.	417 11th St. N. E.
SLADEN, WILLIAM MILTON (0)	D. C.	419 East Capitol St.
SLAUGHTER, DELL PEMBERTON (0)	Okla.	1241 Euclid St.
†SMITH, ARDIS A. (0)	Iowa	2108 H St.
SMITH, AUDLEY L. (6)	Iowa	3644 New Hampshire Ave.
SMITH, H. JOSEPHINE (0)	Ore.	The Ventosa
SMITH, LILLIAN MARTHA (12)	D. C.	313 S St. N. E.
SMITH, MARGARET MARY (79)	Md.	Riverdale, Md.
SMITH, MARGUERITE (0)	D. C.	2406 18th St.
SMITH, RUTH CATHERINE (0)	Va.	N-O Bldg. Govt. Hotels.
†SMOOT, MARGARET WARD (0)	D. C.	2917 13th St.
SOLEM, JOSEPH A. (0)	S. Dak.	230 Wootton Ave., Chevy Chase, D. C.
SPEAR, ROY HARLIN (0)	Okla.	1224 B St. S. W.
SPENCE, CHARLOTTE CALVERT (0)	Md.	College Park, Md.
SPENCER, MARY L. (9)	N. C.	3623 New Hampshire Ave.
*SPILLERS, DWAIN WILLEY (0)	D. C.	1404 12th St.
SPOERRI, JAY FULLER (0)	Ill.	House Office Bldg.
STADLER, ROBERT B. (0)	Texas	1823 G St.
STEENERSON, INGEBORG DOLVAR (0)	Minn.	1327 M St.
*STEVENS, ARTHUR E. (0)	Mo.	920 5th St.
†STEWART, KATHERINE ROMNEY (0)	Utah	100 4th St. S. E.
*STILES, PRUETT (0)	Okla.	124 6th St. N. E.
STILES, THEOBELLE (0)	N. Dak.	514 17th St.
STIMPSON, CHARLOTTE GORDON (84)	D. C.	2141 Wyoming Ave.
STIMPSON, MARGARET (0)	D. C.	2141 Wyoming Ave.
STORCK, DOROTHEA FURLAM (0)	Va.	Virginia Highlands, Va.
*STRAWN, ROXIE NOLAN (13)	Ind.	1315 20th St.
*STUDDS, MARIE AGNES (12)	D. C.	1409 New Jersey Ave.
STURGIS, HUGH LEGARE (84)	Md.	Hyattsville, Md.
*†SUGAR, SAMUEL (0)	D. C.	257 3d St. S. W.
SULLIVAN, THOMAS R. (0)	Minn.	2123 F St.
SWEARINGER, ANITA	Ind.	2912 16th St.
SWECKER, ICIE LILIAN (21)	Va.	300 Va. Ave. South, Clarendon, Va.

SWEITZER, RUTH V. (0)	Mich.	117 12th St. S. E.
SYMONDS, KATHERINE GODFREY (52)	Md.	The Marine
SYMONS, ARTHUR (13)	Mich.	708 Park Road
TAIT, BEATRICE WILKINS (90)	D. C.	Western Ave. and Ellicott St.
TANSIL, REBECCA C. (0)	Tenn.	514 Park Road
TATE, KATHERINE B. (0)	Ala.	216 12th St. S. E.
TAYLOR, ADA LORENE (0)	Md.	R-S Bldg. Govt. Hotels
TEMIN, HENRY (0)	D. C.	515 4½ St. S. W.
TICE, HOWARD MCCOLLY (0)	Pa.	3002 Q St.
TILTON, LEROY WILLIAM (93)	Texas	917 Longfellow St.
TODD, AUGUSTINE JAQUELIN (103)	D. C.	1779 Church St.
†TOLSON, CLYDE A. (0)	Iowa	2900 14th St.
†TOLSON, H. A. (0)	Iowa	2900 14th St.
TOOTHMAN, EDWIN CARSON (0)	Ill.	1405 Rhode Island Ave.
TORONTO, ELEANOR S. (0)	Utah	1333 12th St.
TOWERS, CATHERINE BURKE (0)	D. C.	1440 Belmont St.
TRACY, STANLEY JAMES (0)	Utah	2622 11th St.
TURNER, MARIE ALMA (4)	N. C.	506 East Capitol St.
TUROFF, DORA M. (6)	D. C.	1804 2d St.
VANDOREN, LURANA C. (30)	D. C.	723 8th St. N. E.
VAN NESS, ETHEL M. (47)	N. J.	913 22d St.
VAN WATERS, SHERWOOD P. (94)	N. Y.	1338 Vermont Ave.
VELEY, BERNICE A. (0)	D. C.	3814 5th St.
VICKERS, ROSE (35)	Md.	Willard Courts
VIETH, ANNA MARIE (0)	Mo.	1808 Newton St.
VLIET, ANDREW M. (0)	Ind.	935 New York Ave.
WALL, ADELAIDE D. (74)	D. C.	4009 14th St.
WALLER, LAURA HAZEL (0)	Ohio	1150 North Capitol St.
WALTER, ARTHUR HENRY (15)	Ky.	118 Willow Ave., Takoma Park, D. C.
WALTERS, SYBIL (0)	Iowa	1919 K St.
WARD, JOHN RUSSELL (0)	Iowa	413 A St. S. E.
*WARD, MILDRED (6)	Iowa	413 A St. S. E.
WARING, MARTHA LUCY (49)	D. C.	616 Quebec Pl.
WARNER, WELLMAN J. (0)	D. C.	746 Park Road
WARREN, LEE ELLA (55)	D. C.	1341 Columbia Road
†WARREN, ORLIN P. (0)	D. C.	1914 H St.
WATZMAN, PERCY (28)	D. C.	25 I St. N. E.
WEADON, LEAFY MARGARET (0)	Va.	3413 P St.
WEBSTER, BELLE (12)	Minn.	4007 Garrison St.
*WECKERLY, IDA (0)	Md.	105 E. Bradley Lane, Chevy Chase, Md.
WEIGANDT, HARRY NICOLAI (12)	S. Dak.	507 3d St.
WERNER, ROBERT J. (0)	W. Va.	1920 Hamlin St. N. E.
*WHEELER, HENRY STEVENS (0)	R. I.	House Office Bldg.
WHITE, HELEN MARGARET (70)	D. C.	1002 Nichols Ave. S. E.
WHITE, MILO R. (18)	Ind.	U. S. Patent Office
WHITFORD, MARGARET (91)	D. C.	3369 18th St.
WHYTE, EUNICE (106)	D. C.	935 M St.
WILEY, VIRGIL BROOKS (27)	Del.	1718 17th St.
WILFLEY, KATHERINE (12)	D. C.	1483 Harvard St.
WILEY, HAROLD B. (0)	Mass.	1840 Vernon St.
WILLIAMS, ERNEST F. (57)	D. C.	1235 Madison St.
WILLIAMS, HELEN HARRIETT (0)	D. C.	2907 McKinley St., Chevy Chase, D. C.

WILLIAMS, LOUISE ELIZABETH (0)	D. C.	3917 McKinley St., Chevy Chase, D. C.
WILLIS, BENJAMIN C. (35)	Md.	303 Northbrook Courts
WILLIS, VIRGINIA (0)	D. C.	1324 L St.
WILLIS, VIRGINIA BULLOCK (103)	Va.	Richmond Hotel
WILSON, GENEVIEVE J. (0)	D. C.	The Cumberland
WILSON, JOHN BARNETTE (0)	La.	The Sherman
WILSON, MELVILLE DWIGHT (0)	D. C.	1739 F St.
WILSON, THOMAS BARNETTE (0)	La.	Sherman Apts.
WIMMER, JOSEPH COPE (65)	Pa.	3002 Q St.
*WINGER, WILLIAM D. (0)	Md.	2511 14th St.
WINTERS, CZAR SMITH (6)	Utah	1224 13th St.
WISEHART, MALCOLM (12)	Ill.	Y. M. C. A.
†WOLCOTT, JESSIE M. (0)	Iowa	2022 North Capitol St.
*†WOLFF, FRANCES C. (0)	D. C.	1859 California St.
WOLT, HELEN J. (24)	Neb.	I-K Bldg, Govt. Hotels
WONG, TEH PU (†)	China	2212 R St.
WOOD, KARL H (0)	Va.	Alexandria, Va.
WORTMAN, VOLNEY WINFIELD (115)	Okla.	1843 Calvert St.
*YAGLE, IRMA E. (0)	Ala.	605 North Car. Ave. S. E.
†YATES, FRED LEE (0)	Okla.	1717 Euclid St.
YOHE, ETHEL CRAIGEN (96)	D. C.	1758 S St.
*ZIEGLER, CLARIBEL (0)	Ohio	748 Newton Pl.
ZIRKLE, VERNON B. (0)	Va.	410 3d St.

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICINE

BAER, DONALD ELWOOD (4)	D. C.	1744 Corcoran St.
BIERMAN, MORRIS I. (60)	D. C.	Providence Hospital
BOSWORTH, ROBERT JOSEPH (34)	D. C.	523 5th St. N. E.
BURGIN, WALTER H. (0)	D. C.	1208 Emerson St.
CAMP, FRANCES WILLSON (0)	D. C.	2823 27th St.
CHAREST, ANNA M (42)	Mich.	2581 Tunlaw Road
COLODNY, LEO (0)	D. C.	1404 Park Road
COREY, WILBUR L. (0)	N. Y.	Takoma Park, D. C.
CRESWELL, GEORGE WILLIAM (16)	Md.	*1100 Vermont Ave.
DIATZ, PHILIP (0)	D. C.	654 19th St.
DOWNER, MORTIMER B., Jr. (0)	N. Y.	915 I St.
EANET, PAUL (0)	D. C.	352 I St. S. W.
GARDNER, WILLIAM CLIFFORD (92)	D. C.	2650 Wisconsin Ave.
M. D., 1919 George Washing- ton University.		
GEIER, FREDERICK A. (0)	D. C.	728 13th St. N. E.
GONZALEZ, LUIS (0)	P. R.	1115 I St.
JOHNSON, REGENA COOK (8)	Md.	1420 N St.
*JONES, SALLIE E. (0)	Va.	239 13th St. S. W.
KIBLER, KIRBY (16)	Va.	226 3d St.
KING, IVAN ROBERTS (91)	Ill.	Tudor Hall
McVEY, PAULINE MARGARET (0)	D. C.	1723 G St.
MOXNESS, BENNIE A. (4)	N. Dak.	700 20th St.
MUNOZ, ROQUE N. A. (58)	P. R.	1115 I St.
NIMETZ, AARON (0)	D. C.	1544 9th St.
NOTES, BERNARD (0)	D. C.	302 M St.

OTTENBERG, GILBERT (34)	D. C.	318 Dist. Nat. Bank Bldg.
PAGAN, ALBERT ELWOOD (99)	D. C.	The Rochambeau
PARKER, EVELYN (0)	Vt.	317 A St. N. E.
PEAKE, ISIDORE ALBERT (24)	D. C.	1636 R St.
PHILIPS, JOSEPH JULIUS (0)	D. C.	1233 7th St.
PORTON, STANLEY PAUL (28)	D. C.	1838 11th St.
PULLMAN, PETER B. (0)	Va.	Alexandria, Va. R. F. D. 4.
REED, JOHN ALTON (35)	D. C.	522 6th St.
RHAME, HAROLD E. (0)	D. C.	1236 11th St.
RUSSELL, JOHN PAUL (28)	D. C.	817 6th St.
SCHAFER, WILLIAM LEWIS (0)	Va.	427 Wilkes St., Alexandria, Va.
SCHUTZ, CHARLES A. (0)	Md.	1954 Biltmore St.
SCHWARTZ, PAUL (26)	D. C.	453 Mass Ave.
SLATTERY, MARY JULIE (0)	D. C.	2844 Wisconsin Ave.
*SPANGLER, CASPER S. (0)	Pa.	2032 16th St.
STEIN, JOSEPH (22)	N. Y.	235 Florida Ave.
SWARTWOUT, EDITH LILIAN (44)	D. C.	12 Iowa Circle
†THOMPSON, THOMAS CARLTON (109)	Pa.	Emergency Hospital
THURBER, MILDRED E. (0)	N. Y.	1017 10th St.
VANNATTA, PAUL G. (0)	Mo.	Army Medical School
VENENOZO, FERNANDO OKALA (0)	P. I.	1121 17th St.
WEINSHELBAUME, SAMUEL (0)	N. Y.	1321 8th St.
WIARD, GEORGE CLARK (0)	Va.	933 New York Ave.
*WILLIMAN, FRANK LOUIS (65)	N. J.	109 Burlington Hotel
*YEAMANS, EDWARD CAREY, JR. (0)	S. Dak.	2323 Pa. Ave.
ZEHNER, HARRY (0)	N. Y.	2500 Pa. Ave.

SPECIAL PRE-MEDICAL

*ATKINSON, INA FOSS (0)	D. C.	Copley Courts
AZULA, JUAN B. (12)	Peru	2002 G St.
*BARRY, WILLIAM KEATING (0)	D. C.	1425 Euclid St.
BEACH, MARY JOSEPHINE (18)	Fla.	1920 Belmont Rd.
BEALL, ISAAC (0)	D. C.	176 Uhland Terrace
BELL, STANLEY WILLIAM (25)	D. C.	1325 1st St.
BUTLER, ARDEN JONES (0)	Tenn.	1234 13th St.
BUTLER, HOMER K. (43)	D. C.	609 Kenyon St.
CALHOUN, EDWARD J. (0)	D. C.	1201 Girard St.
CHAPMAN, KATHERINE (0)	Md.	Kensington, Md.
*CLARK, GORDON W. (0)	Utah	614 22d St.
CONKLIN, ROSCOE L. (0)	D. C.	20th and Rhode Island Ave. N. E.
*DAVIS, WILLIAM H., JR. (0)	N. Y.	1422 Massachusetts Ave.
DEAN, BENJAMIN FRANKLIN, JR. (32)	D. C.	916 Massachusetts Ave.
DENISON, ABRAHAM ROBERT (40)	D. C.	2600 K St.
†DORSEY, JAMES ANDREW (10)	Va.	1312 North Carolina Ave. N. E.
*DUBINS, JULIUS (12)	N. Y.	2006 F St.
DUFFEY, HUGH CLARENCE, JR. (28)	D. C.	929 O St.
ELLERSON, EDWIN MURDAUGH (20)	D. C.	2134 R St.

ESCHBACK, PHILIP INNES (0)	Md.	3008 Clifton Ave., Baltimore, Md.
EVANS, LELAND M. (0)	Utah	1224 13th St.
EVANS, THEODORE HUBBARD (0)	Va.	1728 Corcoran St.
FIELD, OLIVETTE ROSALIE (36)	Va.	339 House Office Bldg.
FLETCHER, TRAVIS LEIGH (6)	Va.	1102 L St.
FREELAND, FRED BERNARD (0)	S. Dak.	2004 G St.
FREYER, EUGENE BRYANT (0)	N. Y.	217 F St.
FRIEDENBERG, HARRY (6)	D. C.	917 6th St. S. W.
GREEN, HOLLAND (0)	Ind.	915 N St.
*HALBACH, EDWARD C. (0)	D. C.	1925 Park Rd.
HAMMACK, PAUL WILLARD (15)	Va.	800 L St.
HAMRIC, ETHEL MARIE (0)	Va.	1223 N St.
HOSKINSON, STANLEY LEE (0)	Md.	217 F St.
*†HOWELL, LEHMAN GRANES (0)	Ala.	910 Massachusetts Ave.
HUGHES, WILLIAM HENRY (0)	D. C.	U. S. Naval Medical Hosp.
JANSEN, RUSSELL JOHN (0)	Minn.	1468 Rhode Island Ave.
JENKINS, WILLIAM ALEXANDER, JR. (16)	D. C.	71a L St. N. E.
JOHNSON, DON (0)	Utah	1427 21st St.
JOHNSON, JOHN WAYNE (0)	Md.	Y. M. C. A.
JOHNSON, WILLIAM (0)	D. C.	1813 M St.
†KAMINSKY, ABE (0)	D. C.	106 I St.
KAPLAN, LOUIS NORMAN (0)	D. C.	1309 North Carolina Ave. N. E.
KRAUSE, EDWARD A. (0)	Kan.	Y. M. C. A.
LANG, RICHARD JAMES (0)	N. Y.	623 4th St.
LATTMAN, ISIDORE (2)	N. Y.	1462 Chapin St.
LATTMAN, MORRIS (2)	N. Y.	1462 Chapin St.
LOCKE, HOWARD PALMER, JR. (36)	D. C.	1016 Massachusetts Ave.
*LUDWIG, HARRY ISDORE (0)	N. J.	1210 7th St.
MCCARTHY, JOHN L. (0)	D. C.	702 F St. N. E.
MAXWELL, JOHN EDWIN (0)	D. C.	2311 18th St.
MAYER, JOSEPH A. (0)	Penn.	Huntington Apts.
MONTANI, ROCCO (61)	N. J.	Madeira Apts.
†NAVARRO, VICENTE A. (71)	P. I.	1635 L St.
PATTERSON, HOMER SCOTT (0)	Ga.	2221 Flagler Pl.
†PERELMA, OSSIP (0)	D. C.	302 Evening Star Bldg.
PHILIPS, BERNHARDT (29)	D. C.	1233 7th St.
PIERCE, RALPH NORWOOD (6)	D. C.	1808 Kalorama Rd.
PLOTNICK, BARNEY (0)	Va.	1540 7th St.
POTTER, HAROLD W. (0)	D. C.	2120 G St.
ROSENBLATT, LOUIS (24)	N. Y.	210 Rhode Island Ave.
RUBINO, ANTHONY P. (0)	N. Y.	1321 Quincy St.
SAVAGE, GEORGE POMEROY (0)	Ala.	U. S. Naval Medical School
SCHWAB, ANTON MARTYN (0)	Va.	315 4th St. S. E.
SEARCY, HENRY BRITTON (0)	Ala.	1944 Calvert St.
SECUNDA, HERMAN (0)	N. Y.	517 L St.
SEWARD, DORIS MARIE (0)	Vt.	1341 A St.
SHANNON, WILLIAM ARTHUR (28)	D. C.	1528 9th St.
SHOTWELL, CLARENCE L. (0)	Va.	Falls Church, Va.
*SLAUGHTER, ROSALIE (0)	Mo.	Bureau War Risk Insurance
SMITH, HOWARD L. (0)	D. C.	601 Carroll Ave., Takoma Park

SOMERS, CHARLES J. (0)	N. J.	2023 G St.
STRETCH, JAMES E. (0)	Conn.	1723 G St.
STROUP, HORACE CLIFFORD (0)	Penn.	1739 F St.
SWAIN, ALPHONSINE B. (0)	Mo.	X-Y Bldg., Govt. Hotels
USILTON, LIDA J. (22)	D. C.	2034 North Capitol St.
*VAUGHAN, MERLON G. (0)	Va.	905 13th St.
†WALKER, FERRIS (0)	D. C.	2548 17th St.
*WATSON, LEWIS RANDOLPH (0)	Md.	306 Hammond Ct.
WEEKS, NORMAN E. (0)	D. C.	3200 12th St. N. E.
WELSH, THOMAS F. (0)	Utah	1741 G St.
WHALEN, EDWARD WILLIAM (0)	Penn.	1819 F St.
†WILTON, RALPH WILLIAM (0)	D. C.	1335 22d St.
WIRE, GEORGE EDWARD (0)	Va.	933 New York Ave.

SPECIAL

AARONSON, RUTH	D. C.	1106 Fairmont St.
†ABSTEIN, GLADYS H	D. C.	1515 Mass. Ave.
ADAMS, MARY JO.	Tenn	1309 P St.
ADAMS, RUTH CARLISLE	N. J.	1349 R St.
*ADAMSON, LOUISE	D. C.	635 Dahlia St., Takoma Park, D. C.
*APFLECK, MADGE G.	Va.	1104 M St.
*AGNEW, ETHNA M.	D. C.	1106 Fairmont St.
*AGNEW, HELEN	D. C.	The Rochambeau
AKERS, EDNA	Ky.	2030 F St.
†ALEXANDER, SUSAN	Ill.	222 Oak Ave., Takoma Park, D. C.
ALLEN, ELSIE M.	Ohio	314 House Office Bldg.
ALLEN, GLENNA M	Iowa	E-F Bldg., Govt. Hotels
ALLNUTT, EDITH LOUISE	D. C.	38 Florida Ave.
AMAN, DOROTHY NESBIT	Md.	Hyattsville, Md.
*AMBLER, NANCY	Iowa	1360 Otis Place
AMBROSE, ANITA M.	D. C.	647 G St. S. E.
*ANDERSON, ALBERT F.	D. C.	70 U St.
ANDERSON, FLORENCE	Ohio	P-Q Bldg., Govt. Hotels
*†ANDERSON, IRENE	Mo.	1822 Mass Ave.
*†ANDREWS, MARY LeBARON	W. Va.	1819 G St.
†ANTISELL, MARION BRUMM	Md.	Silver Spring, Md.
ARNERSON, MARIAN G	Minn.	51 Bryant St.
ARROWSMITH, JEAN M.	Pa.	1717 S St.
ARTHUR, LINCOLN D.	N. Y.	1103 17th St.
ATEN, MARIAN FRANCES	D. C.	1432 Meridian St.
†ATKINSON, FRANCES ELEANOR	Kansas	1822 Mass. Ave.
AUSTIN, SADIE M.	Md.	122 Willow Ave., Takoma Park, Md.
AVERY, HASTINGS PALMER	D. C.	1220 11th St.
†BAILEY, ETHEL	D. C.	25 Rock Creek Church Road
BAIN, GOERGIE B.	Texas	1412 Mass Ave.
BAIRD, ALICE LOUISE	N. C.	1636 Irving St.
*BAKER, ABBY GUNN	D. C.	Clifton Terrace, West
†BAKER, CAROLINE B.	Ohio	712 B St. S. W.
†BAKER, MARY SUTHERLAND	D. C.	4925 Conduit Road
*BALDWIN, MARY A.	N. Y.	Kenesaw Apts.
*BALLARD, MARY	Texas	1319 K St.
†BAMBERY, ANNE	Minn.	2228 Decatur Place
BARAGWANATH, GENEVIEVE	Ill.	1669 Columbia Road

BARBOUR, ELIZABETH M.	N. Y.	1501 Irving St.
BARKER, DOLLY BEATRICE	Ohio	1778 Lanier Place
BARNES, FLORENCE HILLS	D. C.	1425 Chapin St.
*BARNES, MEDORA E.	D. C.	1501 Hamilton St.
*BARNHART, ELEANOR T.	D. C.	53 W St.
BARR, COURTLAND H	Del.	917 East Capitol St.
*BARTLETT, DONALD SAULSBURY	Idaho	1739 P St.
*BARTLETT, LILA MAY	Tenn.	1838 Jackson St. N. E.
*BARTON, MRS. W. M.	D. C.	1730 Conn. Ave.
*BASSETT, SAMUEL B.	D. C.	211 Rock Creek Church Rd.
BATES, ELIZABETH M.	Ill.	1022 11th St.
*BATTSON, AMY ELLEN	D. C.	1100 Euclid St.
BAUMONK, ROSS S.	Ind.	1739 P St.
BAUR, MARTHA M.	Mich.	3012 13th St.
BEACH, JESSIE G.	Texas	717 21st St.
*BEAVERS, JOHN MARBURY, JR.	D. C.	1752 Columbia Road
BEECHWOOD, VIOLA	Kans.	601 E St.
BEIDLEMAN, MARGARET D.	Pa.	1229 Conn. Ave.
BELL, FLORENCE COLFAX	N. Y.	3149 Mt. Pleasant St.
*BELL, HATTY	N. C.	1202 18th St.
BELL, VIRGINIA LEE	Va.	1332 15th St.
†BELL, HELEN WALTON	D. C.	720 H St. N. E.
BENHAM, F. MAE	D. C.	1354 Parkwood Place
BENNETT, KENNETH LEONARD	N. Y.	Clarendon, Va.
†BENNETT, MARTHA D.	D. C.	4322 14th St.
†BERGHOLZ, ANITA L.	D. C.	1217 30th St.
BERRY, H. B.	Iowa	Munitions Bldg.
A. B., 1914; LL.B., 1915, University of Iowa		
BERRY, INDIANOLA M.	Ill.	110 Seaton Place
†BHOLES, ELMA E.	Wis.	413 Quincy St.
BICKEL, GERTRUDE MARIE	Pa.	2010 O St.
BICKEL, MARION LOUISE	Pa.	2010 O St.
BIER, ROBERT ALLAN	D. C.	660 K St. N. E.
*BILLINGSLEY, CONNIE	Miss.	728 3d St. S. E.
*BIERNIE, MARTHA NOYES	D. C.	1711 19th St.
A. B. 1915; A. M. 1916 George Washington University		
BLACKMAN, MARY	Kans.	1730 First St.
BLACKSHEAR, PAUL DAVID	Ga.	1314 Mass. Ave.
BLAKE, RAMONA E.	Md.	Hyattsville, Md.
†BLOSSER, BESSIE E.	Pa.	1719 13th St.
*BLOSSER, NELLIE B.	Ohio	200 A St. S. E.
BLYSTONE, MORNING E.	Ind.	1347 L St.
*BOARDMAN, MARTHA A.	Wash.	1854 Ontario Place
BOLAND, MAY FRANCES	D. C.	2113 N St.
*BONNETTE, EVA M.	Okla.	618 O St.
*BOOTH, ELIZABETH M.	D. C.	2516 13th St.
BOSWELL, FRANCES R.	D. C.	238 New Jersey Ave.
BOWERS, MIRIAM GRACE	Wis.	6th and B Sts.
*†BOWIE, EVANGELINE	Tenn.	1333 12th St.
BOWIE, JOSEPHINE M.	D. C.	3712 Patterson St.
†BOWMAN, JESSIE ELMA	D. C.	920 D St. N. E.
*BOYNE, CAROLINE	D. C.	1309 Fairmont St.
BOYNTON, AMY CANN	Ohio	Glen Echo, Md.
BRADEN, MOZELLE ELIZABETH	D. C.	4002 Kansas Ave.
BRADFELD, MARY ELIZABETH	Ind.	1219 Fairmont St.

BRAGG, MARY A.	Okla.	1635 Irving St.
*BRANDES, GERTRUDE	Texas	1748 S St.
*BRANDT, LOLA	Wis.	X-Y Bldg., Govt. Hotels
*BRAUNER, GEORGE LESTER	Va.	1012 New Hampshire Ave.
*BRAY, BLANCHE R.	Ill.	2004 G St.
†BRIGHAM, ESTHER MARION	Mass.	821 North Car. Ave. S. E.
BRIGHT, DAISY	Miss.	1818 H St.
†BRILMYER, GEORGE JOSEPH	D. C.	45 Q St. N. E.
†BRINLY, MARY	Ohio	A-B Bldg., Govt. Hotels
BRISTOL, KATHERINE F.	Ill.	1804 Kilbourne Place
*BROCK, DOROTHY F.	D. C.	1833 Irving St.
BROCK, JESSIE	D. C.	717 21st St.
*BROWN, AGNES MARJORIE	Iowa	1921 N St.
†BROWN, DOROTHY THORNTON	Mo.	1822 Mass Ave.
*BROWN, GENEVA A.	Me.	1854 Ontario Place
*BROWN, HAZEL G.	Ill.	67 Adams St.
*†BROWN, ISABEL	N. M.	901 M St. N. W.
BROWN, MABEL A.	Ill.	A-B Bldg., Govt. Hotels
BROWN, MARY AGNES	D. C.	4606 15th St.
*BROWN, MARY LAVINIA	Mass.	3459 14th St.
BRUCE, EDMOND	D. C.	731 Rock Creek Church Road
BUCKINGHAM, LELAH	Ind.	1316 New Hampshire Ave.
BUCKLEY, RUTH	Mo.	2433 18th St.
*BUDER, CHARLES M.	N. J.	1824 New Hampshire Ave.
*BUIE, MAZIE	Miss.	1448 Girard St.
BUKER, LUCY M.	Va.	2506 K St.
Litt. B., 1916, Boston University		
BURCH, RUTH REID	Ga.	2120 P St.
†BURCHARD, ETHEL M.	D. C.	1800 K St.
*BURCHFIELD, HENRIETTA	N. Y.	721 19th St.
*†BURGESS, MAJORIE S.	D. C.	2530 13th St.
*BURK, CAROLINA	Ind.	2509 17th St.
BURKE, THOMAS FRANCIS	Mass.	322 11th St. S. W.
*BURKET, RHEES EVANS	Md.	Chevy Chase, Md., R.F.D. 2
*BURNETT, ELIZABETH	D. C.	2114 LeRoy Place
*BURNHAM, HELEN	D. C.	1338 Fairmont St.
BURNHAM, SARA FLORENCE	N. Y.	Munitions Bldg.
*BURRELL, HENRIETTA	D. C.	3401 Wisconsin Ave.
*BUSH, GLADYS A.	Ill.	36 W St.
BUSHONG, L. D.	Va.	2201 K St.
*BUTLER, ELOISE M.	Va.	3347 18th St.
BUTLER, IRIS MARY	Ga.	2164 Florida Ave.
†BUTLER, NICHOLAS GEORGE	Conn.	Georgetown University
CALDWELL, MILLARD L.	Va.	Clarendon, Va.
CALLAHAN, VINCENT FRANCES	D. C.	1729 North Capitol St.
CALVIN, JEANNETTE MALINDA	Ind.	1536 16th St.
CAMERON, DANIEL A.	Ill.	74 V St.
CAMPBELL, JEAN THOMPSON	D. C.	301 8th St. N. E.
CAMPBELL, MYRTLE	Ala.	1358 Harvard St.
*CARLSTEDT, ALFHILD M.	Minn.	1335 Columbia Rd.
†CARMICHAEL, VIRGINIA		
TUCKER	D. C.	Stoneleigh Court
CARMODY, F. J.	Ill.	1419 Columbia Rd.
CARROLL, ELLEN LEE	Miss.	811 10th St.
CARROLL, HELEN CATHERINE	Ill.	2408 K St.
CARTAN, MARGARET S.	D. C.	20 New York Ave., Takoma Park, D. C.

CARTER, AGNES A.	D. C.	1314 B St. S. W.
*†CARTER, GERTRUDE I.	Va.	The Cairo
CASE, ALICE D.	D. C.	The Cordova
Ped. B., 1916, Berea College		
*CASTLEMAN, FRANCES F.	Va.	East Falls Church, Va.
*CAVANAGH, JEANETTE	D. C.	4011 Marlboro Pl.
*CAWOOD, LUCILE	D. C.	1418 21st St.
CECIL, GERTRUDE E.	D. C.	3425 16th St.
CHACE, MARIAN	D. C.	5300 Belt Rd.
†CHAMBERLAIN, DOROTHY	Md.	Garrett Park, Md.
CHEEK, MILDRED	D. C.	201 E St. S. E.
*CHEN, QUEH KING	China	103 2d St. N. E.
CHICKERING, ELIZABETH E.	N. H.	1639 W St. S. E.
CHILIMIDOS, JAMES	D. C.	309 9th St.
CHRISTIAN, CORINNE C.	La.	3711 Huntington St.
CHRISTIAN, JOHN FARRAR	D. C.	1348 Euclid St.
†CHURCHILL, DORIS E.	N. Y.	1800 New Hampshire Ave.
*CHURCHILL, VIRGINIA H.	Mo.	N-O Bldg., Govt. Hotels
*CINCEVICH, KATE	D. C.	The Northumberland
CLARK, ELIZABETH H.	D. C.	Station No. 2, New York Ave.
CLARK, GRACE	N. Y.	1110 P St.
CLAVELOUX, IRENE C.	D. C.	2000 North Capitol St.
CLAVELOUX, MARIE K.	D. C.	2000 North Capitol St.
CLAY, WAVA FRANCES	Md.	1350 Kenyon St.
*CLENENIN, WILDA	Penn.	1122 13th St.
CLEVELAND, MARION ELINOR	Md.	Kensington, Md.
CLIFTON, KATHRYN	D. C.	1425 Belmont St.
*†CLOYD, ESTHER A.	Kans.	1431 California St.
COATES, BRUCE	Miss.	1318 Harvard St.
COBB, AUDA C.	Mo.	1428 Clifton St.
†COCKRELL, MARGARET LOUISE	Va.	1352 Parkwood Pl.
COHEN, MOLLIE	Ohio	2016 P St.
COLBURN, D. ALTHEA	Mich.	5 Iowa Circle
†COLBURN, GEORGE F.	D. C.	1942 2d St.
COLE, AGNES B.	D. C.	1726 Park Rd.
COLE, LOTTIE M.	N. Dak.	R-S Bldg., Govt. Hotels
COLEMAN, CHARLES HUBERT	D. C.	American University Pk.
*COLLIER, GERTRUDE ALICE	Penn.	1341 A St. N. E.
COLVILLE, ELIZABETH	Tenn.	2514 Ontario Rd.
COMER, JENNIE E.	Minn.	1754 Kilbourne Pl.
CONNER, GEORGE LANGLEY	D. C.	5206 Illinois Ave.
*CONNINGTON, MARY G.	Calif.	X-Y Bldg., Govt. Hotels
CONVEY, ANNA	Wis.	2408 K St.
COOGLE, ANNA BELLE	Iowa	310 Indiana Ave.
†COOK, CHARLES MORRIS	D. C.	1110 Park Rd.
*COOK, HARRIET IRENE	Ill.	P-Q Bldg., Govt. Hotels
†COOK, MARY L.	Miss.	2300 18th St.
†COOK, VIVIEN E.	Miss.	104 Woodley Apts.
*COOPER, EDWIN WAINWRIGHT	Conn.	918 16th St.
†CORBETT, FRANCES	D. C.	535 Cedar St., Takoma Park, D. C.
CORNELL, MARY NEVILLE	D. C.	2434 Pennsylvania Ave.
*CORNWELL, ANNIE BOLTON	Va.	100 Grafton Ave., Clarendon, Va.
COSGROVE, MARGARET F.	Minn.	St. Vincent's Villa
*COULON, GENEVIEVE J. F.	D. C.	1022 Park Rd.

*COUTURE, MILDRED L.	N. H.	1819 Adams Mill Rd.
COVINGTON, ELIZABETH	Tenn.	617 Quebec Pl.
*COWAN, ESTHER W.	N. Y.	124 Thomas St.
COWGILL, PAUL	D. C.	1736 T St.
COX, CARRIE MAJORS	D. C.	606 Butternut St., Takoma Park, D. C.
CRAMER, ALMA H.	D. C.	2036 1st St.
*CRAMER, IVERNA L.	D. C.	2036 1st St.
*CRANDALL, ADA ELIZABETH	D. C.	1873 Newton St.
*CRIDER, MARY L.	Ohio	3321 Holmead Pl.
*CREDLE, KATE	N. C.	1440 M St.
*CROFT, LORENA BELLE	Md.	940 22d St.
CROCKER, WILLIAM MORTIMER	D. C.	Congress Hall Hotel
CROMWELL, VIRGINIA RICHARDS	Ky.	1432 M St.
CRONIN, HERBERT THOMAS	Mass.	719 11th St.
CROSSMAN, FLORENCE C.	Va.	East Falls Church, Va.
*CROWLEY, KATHLEEN	Conn.	3449 14th St.
CULLEN, SARA L.	Va.	1105 O St.
*CULLY, RUBY M.	Ill.	2004 G St.
†CULP, RUBY L.	Okla.	1343 Park Rd.
*CURRY, CHARLES FORREST	Calif.	House Office Bldg.
*CURRY, IRIS	Miss.	500 East Capitol St.
DADY, ROY C.	D. C.	650 L St. N. E.
DALY, L. NUGENT	N. Y.	1110 M St.
DAMERON, MARJORIE	Tex.	1129 Girard St.
DANFORTH, LOUISA A.	D. C.	2264 Mt. View Pl. S. E.
*DANIEL, ROBERT CLINTON	D. C.	Y. M. C. A.
*DAVENPORT, BLANCHE L.	Mass.	1231 20th St.
DAVIS, EMILY CLEVELAND	D. C.	1305 N St.
†DAVIS, JEANNETTE	Ind.	1756 Columbia Rd.
*DAVISON, FLORENCE	Ohio	3547 Holmead Pl.
†DEATHERAGE, ALICE PAULINE	D. C.	1101 Euclid St.
DEBORD, GEORGE GORHAM	Okla.	205 A St. S. E.
DECKLER, VERA I.	D. C.	1209 Girard St.
DELANEY, ELIZABETH V.	D. C.	The Northumberland
DEMING, GEORGE M.	D. C.	3903 Grant Rd.
DENTON, A. GENEVA	Tenn.	1531 Vermont Ave.
†DESAPARRE, JOHN	D. C.	1819 G St.
*†DILLARD, AMY BONNIE	Ky.	X-Y Bldg. Govt. Hotels
DOIG, NAN ADAM	D. C.	1114 Vermont Ave.
*DOING, ELEANOR E.	D. C.	1726 Newton St.
†DONALDSON, ELSA	D. C.	20 R St. N. E.
*DORMAN, SADIE VIRGINIA	Penn.	1411 Newton St.
DORTSCH, WILLIAM BASKERVILL	D. C.	1510 Park Rd.
*DOUGHERTY, DOROTHY	N. Y.	1119 I St.
*DOUGHERTY, EDELLA M.	D. C.	1451 N St.
*DOWNES, MARY	Calif.	1110 P St.
DOYLE, ETHEL A.	Ill.	4901 13th St.
*†DRAFER, LYDIA S.	D. C.	The Mendota
†DRAPER, MILDRED T.	D. C.	The Mendota
DREW, ALICE EUNICE	Fla.	1922 Belmont Rd.
†DREW, ERMA	Ill.	1209 Girard St.
DREW, MARIETTA E.	Fla.	1922 Belmont Rd.
*DROLLINGER, NONA F.	D. C.	2011 F St.
DUFF, EVELYN G.	Mich.	3311 Ross Pl.
DUMOND, MARION	N. Y.	1366 South Carolina Ave. S. E.
DUNIN, STANISLAU M.	Wis.	107 Carroll Ave. S. E.

†DUNN, HASSELTINE	D. C.	1449 Fairmont St.
DUTTON, LILLIAN B.	D. C.	912 Kennedy St.
*†DYER, JANE	D. C.	Govt. Hotels
ECCLES, PARLEY P.	Utah	Senate Office Bldg.
ECKARD, ILLINOIS	Ill.	2134 Flagler Pl.
ECKEL, J. CHARLES	Md.	Lincoln Hotel
ECKELS, VIRGINIA	D. C.	2122 LeRoy Pl.
ECKMAN, LULU LEE	Ohio	3914 Huntington St.
*EDGERLY, NINA	N. H.	R-S Bldg., Govt. Hotels
EHRINGER, LULA A.	Ind.	2112 F St.
†ELESTON, MARY R.	Wis.	1420 R St.
†ELIASON, MARY E.	D. C.	1712 17th St.
†ELLIOTT, EDITH LOUISE	D. C.	1006 B St. N. E.
*ELLIOTT, JOHN E.	D. C.	1722 21st St.
*ELY, KATHLEEN E.	Iowa	V-W Bldg., Govt. Hotels
EMBRY, WILLIAM EDWIN;	Fla.	2443 14th St.
ENGLE, BYRON E.	Ill.	1741 Church St.
*†ENGLE, HELEN LORRAINE	Texas	1308 Rhode Island Ave.
EPPLER, META F.	Md.	C-D Bldg.; Govt. Hotels
A. B. 1914, Western Maryland College		
*ERICKSON, ESTHER S.	D. C.	18 Bryant St.
ERNSKY, HELEN MILDRED	N. Y.	1122 13th St.
ESCHER, JULIA M.	Ariz.	1412 15th St.
†ESGATE, EDITH	Iowa	2506 K St.
†EVANS, NORMA B.	N. Y.	1234 Mass. Ave.
EXLEY, CLARENCE M. JR.,	D. C.	1449 Monroe St.
FAIRFIELD, MYRA O.	Ind.	1760 Euclid St.
*FARLEE, HELEN MAY	D. C.	636 Irving St.
FARLIN, VIVIA S.	D. C.	2201 Potomac Ave.
FARNHAM, EDITH DEAN	Mich.	1933 Park Road
FARNHAM, LILLIAN PARKER	Md.	224 Woolton Ave., Chevy Chase, Md.
FARRELL, AGNES M.	D. C.	1424 Clifton St.
FARRIS, MAY	Ind.	3539 13th St.
*FEER, ELIZABETH ANNA	Mass.	1754 Columbia Road
FEREBEE, CORA BOUCHELLE	N. C.	1812 H St.
*FETTER, HELEN HARRIETT	D. C.	1526 29th St.
FIFIELD, VERA EVELYN	Mass.	1801 California St.
*†FINAGIN, LEROY	D. C.	3210 9th Pl. S. E.
FISCHER, HELEN REGINA	D. C.	1744 Lanier Place
*FISHER, ALINE M.	Ind.	1826 Calvert St.
*FITZGERALD, TERSEA	D. C.	P-Q Bldg., Govt. Hotels
*FLAHERTY, EMERY ROBERT	Va.	Herndon, Va.
FLANAGAN, MILDRED V.	Va.	3288 Hiatt Place
*FLEMING, JEAN B.	Ill.	V-W Bldg., Govt. Hotels
*FLETCHER, LILLIAN HILDA	Vt.	1489 Newton St.
*FLETCHER, PEARL A.	Mich.	42 Rhode Island Ave.
FLINN, THERESA M.	Pa.	2304 First St.
*FLOOD, GENEVIEVE	D. C.	1322 Mass. Ave.
FLYNN, ALICE W.	N. Y.	2603 Mozart Place
*FOLEY, MAE C.	Wis.	56 Channing St.
FORD, DORIS LILLIAN	Mass.	1240 11th St.
FOREMAN, GENEVIEVE	Ill.	1256 Columbia Road
*†FOSTER, ANITA H.	D. C.	1505 22d St.
*†FOSTER, E. M.	D. C.	1505 22d St.
FRAKER, ADA ELLEN	Tenn.	1124 12th St.

FRAKER, MAY	Tenn.	1124 12th St.
FRANTZ, FRIEDA A.	N. Y.	1416 R St.
FREEMAN, ELSIE M.	Ill.	1150 North Capitol St.
*FREEMAN, HARRIET A.	Ore.	2117 G St.
FREY, MABEL JOYCE	D. C.	1448 Park Road
*FRIX, LAURA GORDON	Ga.	Copley Courts
FROATS, GLADYS ETHEL	Minn.	113 Kentucky Ave. S. E.
FRYE, INA LEE	W. Va.	815 Conn. Ave.
FULLER, LOUISE	Ill.	436 10th St.
FUTTERER, LULU M.	D. C.	1446 N St.
*GAHN, BESSIE W.	D. C.	East Wardman Courts
*GALBRAITH, ESTHER E.	D. C.	3425 14th St. N. E.
A. B., 1914, George Washington University		
GALE, ELLEN F.	Minn.	Maryland Apt.
*†GANS, WILHELMINA BURTON	D. C.	The Iowa
GARBER, ELSIE S.	D. C.	1480 Harvard St.
GARDNER, KATHRYN	Mo.	1318 Harvard St.
GARGES, ISABEL ANNE	D. C.	1834 Calvert St.
GARRATT, INEZ E.	N. Y.	1336 11th St.
*GARRETT, BETTY B.	Pa.	1815 18th St.
†GARRETT, EDNA S.	N. Y.	V-W Bldg. Govt. Hotels
*GARVIN, RUTH I.	Ind.	617 M St. N. E.
*GARZIOLIA, MARIE HOWE	D. C.	2017 I St.
GATES, ISABEL LIKENS	D. C.	2735 Ontario Road
*GATES, MARGARET I.	D. C.	2735 Ontario Road
GATES, PHEBE CHAPPELL	D. C.	1901 18th St.
*GAUGHAN, FRANK J.	Pa.	1226 Mass. Ave.
GAULT, ANNA CAROLINE	N. Y.	508 5th St.
GERBER, ELLA M.	D. C.	701 Florida Ave.
*GERBER, HELEN CATHERINE	D. C.	The Iowa
GESSFORD, ROGER D.	D. C.	2536 14th St.
GIBSON, MARGARET C.	N. Y.	1206 Lamont St.
GILPIN, BETTIE	D. C.	14 Concord Ave.
GLANCY, MARY ELLA	Kans.	1110 M St.
GLEASON, MARY HANNAH	Mass.	I-K Bldg., Govt. Hotels
GLEISSNER, GRETCHEN L.	Minn.	633 Kenyon St.
GLENN, AMY	Texas	1325 11th St.
GLENN, SUE KATHRYN	Texas	1325 11th St.
GODDARD, EUNICE F.	Me.	112 Varnum St.
GOEHRING, RICHARD E.	Pa.	5102 14th St.
GOLD, DEBORAH IDA	Mass.	Tuxedo Apts.
†GORMAN, JOHN I.	D. C.	1317 Columbia Road
†GOTT, MARY E.	Mo.	1311 14th St.
GRAHAM, ALINE STOCKS	Va.	76 Monmouth Ave., Cherrydale, Va.
†GRAHAM, JAMES G.	N. Y.	Walter Reed Hospital
GRAHAM, LUCILE A.	Va.	Arlington, Va.
GRAHAM, MARY EDITH	D. C.	3015 Dunbarton Ave.
GRAMMER, ELIZABETH	Va.	3062 Q St.
*GRAVES, FLORENCE A.	D. C.	Smithsonian Institution
GRAY, WINIFRED A.	W. Va.	G-H Bldg., Govt. Hotels
GREENLEAF, WALTER JAMES	Me.	1012 17th St.
GREENUP, NELL BLANCHE	Mo.	1910 16th St.
*†GREER, CHRISTINE ANN	D. C.	207 S St.
GREGORY, L. BLANCHE	N. C.	1733 P St.
GRIFFITH, HAZEL ELIZABETH	D. C.	2116 Conn. Ave.

†GRIFFITH, OLIN N.	D. C.	2116 Conn. Ave.
GRIFFITH, VIRGINIA ROSEBERRY	D. C.	2116 Conn. Ave.
†GRIMMINGER, ANNA S.	Pa.	119 12th St. N. E.
GRONCKE, CHRISTINE	Md.	Brentwood, Md.
*GROSVENOR, LULU E.	Iowa	212 2d St.
GUEST, WILLIAM HENRY	S. C.	612 3d St.
†GUNNELLS, MARTHA	Md.	722 18th St.
GUNNISON, ELIZABETH I.	Neb.	216 E St. N. E.
GUNTER, DOROTHY C.	D. C.	1445 Mass. Ave.
*HAAS, FRIEDA K.	Ohio	2507 17th St.
HAGEMANN, ELEANOR FELICITAS	Germany	2141 Wyoming Ave.
*HALDERMAN, CHARLOTTE D.	Pa.	1358 Harvard St.
*HALEY, THERESE V.	D. C.	1341 Perry Place
*HALIDAY, JOSEPHINE BROMLEY	Pa.	608 A St. S. E.
*HALL, NETTIE RUTH	Ill.	808 Mass. Ave. N. E.
†HALLEY, ELLA I.	Md.	Mt. Rainier, Md.
*HALLINAN, MARY L.	D. C.	1723 Euclid St.
*HALVERSON, LILLIAN GRACE	S. Dak.	1028 16th St.
*HAM, MARY LUCY	N. Y.	401 6th St.
*HAMELIN, GRACE CECILIA	Mass.	1495 Newton St.
HAMILTON, ANNA MARY	Pa.	626 D St. N. E.
*HANDY, MARIE BRECKENRIDGE	D. C.	1937 Park Road
HANLEY, LORETTA M.	Vt.	1304 Fairmont St.
†HANNAH, GEORGE M.	D. C.	608 I St. S. E.
*HANNON, ALLETA	D. C.	2120 G St.
*†HANSEN, DORA	Va.	Vienna, Va.
*HAPPER, HELEN CAMERON	Canada	1443 Belmont St.
*HARDY, CONYA L.	S. C.	1916 G St.
*HARGETT, HELEN RUTH	Kans.	1710 P St.
HARRIS, ANNA MARY	Ill.	1717 17th St.
*HARRIS, BIRDIE	Texas	1736 F St.
HARRIS, M. MARIE	Ill.	1717 17th St.
†HARRIS, PAULINE ELIZABETH	D. C.	2306 First St.
HARRIS, PHILIP R.	D. C.	1870 Monroe St.
HARRISON, MARGARET T.	N. J.	The Alabama
HARRISON, MARY I.	D. C.	619 23d St.
HARTMAN, ALFRED A.	Conn.	3456 Newark Ave.
*HARVEY, ABIGAIL	D. C.	2146 Florida Ave.
HARVEY, NELLE S.	Texas	1315 P St.
*HASLUP, LEANORE A	D. C.	2114 18th St.
*HAUSMAN, MARY LOUISE	D. C.	2347 Ashmead Place
HAY, MARY M.	Conn.	L-M Bldg., Govt. Hotels
HAYES, MARY ALETHA	Ind.	1515 Mass. Ave.
†HAYNES, HENRY	D. C.	1910 G St.
HEAL, BERNICE INDIA	Ind.	629 Lexington Place
†HEALY, THOMAS PATRICK	D. C.	58 Rhode Island Ave.
HEARIN, JAMIE HOLCOMBE	Ala.	1901 Wyoming Ave.
HEATH, LUCILLE O.	Wis.	1839 16th St.
HEATH, MYRTLE L.	Wis.	1839 16th St.
*HEBB, VIRGINIA E.	Md.	1205 15th St.
†HEDDEN, EVA M.	D. C.	1908 Belmont Road
HEFLIN, CECIL RANDOLPH	Va.	1226 13th St.
*HEIDLER, ANTOINETTE MARIE	Ill.	P-Q Bldg., Govt. Hotels
HEIN, YRSA	N. Y.	Wardman Courts, West
HEISS, MARGARET E.	D. C.	3712 Keokuk St.
†HEITMULLER, HELEN P.	D. C.	1505 22d St.
†HENDERSON, EMMA LOUISE	Colo.	1414 16th St.

HENDERSON, BERTHA	D. C.	2613 13th St.
*HENDERSON, JOHN RAYMOND	D. C.	3803 Keokuk St.
*HENDRIKSON, LYDIA	D. C.	1638 15th St.
*HENSKE, GODFREY W.	Mo.	Walter Reed Hospital
HERBERT, JAMES W.	D. C.	2020 G St.
HERRING, ANNIE F.	N. C.	128 E st. S. E.
*HERRING, ELEANOR EMMA	W. Va.	1326 Park Road
*HESTER, MARGARET	D. C.	2114 G St.
†HETTMAN, ANN M.	Ill.	1104 M St.
HICKEY, MARY J. C.	D. C.	516½ 2d St. S. E.
*HILEY, MARIHUE	Ala.	64 Randolph Place
HIRONIMUS, HELEN C.	Ind.	436 10th St.
*HOAGLAND, MARGARET TODD	D. C.	The Cordova
†HOCHWALT, EARL B.	Ohio	Walter Reed Hospital
HOFF, FLORA S.	N. Y.	1316 Euclid St.
HOFFMAN, DALE ELIZABETH	Mo.	1929 Calvert St.
HOLE, MYRA CADWALADER	D. C.	308, The Lonsdale
HOLLINGSWORTH, FAYE	Okla.	Fontanet Courts
HOLLINGSWORTH, GEORGE WAYNE	Okla.	Fontanet Courts
†HOLMES, EDITH F.	S. Dak.	2320 G St.
HOLMES, GRACE BRUCE	D. C.	721 Shepherd St.
*HOLMES, MRS. WILLIAM H.	D. C.	1454 Belmont St.
*HOLMES, RUTH MADELINE	D. C.	910 Webster St.
†HOLT, RALPH MANNING	N. C.	1600 Rhode Island Avenue
*HOOKER, BLANCHE F.	Ill.	2009 N St.
*HOOVER, MARTHA A.	D. C.	1340 Irving St.
HOPE, MARY	D. C.	1733 Q St.
HOPKINS, HELEN HILL	D. C.	1926 Biltmore St.
HORAN, AGNES C.	N. Y.	P-Q Bldg., Govt. Hotels
†HORNTHAL, HENRY AMISS	Va.	1717 35th St.
HOUGHTON, GRACE L.	Mass.	313 A St. S. E.
*HOUT, HARRY L., JR.	Va.	2015 Flagler Place
HOWE, LOUISE MARGUERITE	N. Y.	2137 LeRoy Place
HOWLETT, BESSIE	D. C.	1000 22d St.
HROMATKO, JANE S.	Iowa	1634 19th St.
HUBBS, WILMA M.	W. Va.	201 Tenn. Ave. N. E.
HUBER, ARISTA	Ohio	58 Bryant St.
†HUDSON, TERESA E.	Va.	1010 New Hamp. Ave.
†HUFF, FANNIE MAE	Tenn.	206 13th St. N. E.
*HULETT, ALICE M.	D. C.	108 9th St. S. E.
*HUMPHREYS, ELIZABETH	Miss.	1819 G St.
FONTAINE A. B., 1916, Sophie Newcomb College		
*HUNT, LESLIE L.	Ill.	5219 Georgia Ave.
HURST, LEE NORA	Ky.	621 Rock Creek Church Rd.
HYER, GRACE L.	D. C.	1332 9th St.
HYNES, WILLIAM JOSEPH	Mass.	715 Lawrence St.
HYSLOP, CLARENCE MONROE	Neb.	2519 Hall Place
*IEHL, LAUREL E.	D. C.	Cumberland Apts.
†ILES, CHRISTINE	Kans.	1207 Delafield Place
*IRVINE, THOMAS B.	D. C.	443 10th St. N. E.
IVEY, EDWARD	Tenn.	210 B St. S. E.
*JACKSON, EDITH PAULINE	Ind.	130 12th St. S. E.
JACKSON, JOHN VIRGIL	Mo.	1507 30th St.
†JACKSON, WALTER W.	D. C.	203 Fontanet Courts
JAMES, MINNIE MARGARET	D. C.	3317, General Land Office

*†JAKUES, DOROTHY SIBYL	D. C.	217 3d St. S. E.
JEFFERS, CLARIBEL	Ala.	214 2d St. N. E.
JENNINGS, HARRY PARKER	D. C.	1136 Buchanan St.
*JERMAIN, NINA LAURETTE	Mich.	1209 O St.
JERMAN, ANNE ELIZABETH	Ohio	1764 U St.
JERMAN, EDITH CATHERINE	Ohio	1764 U St.
JERMYN, MARION SHERLOCK	D. C.	908 11th St.
JEHOLAMAN, VERA N.	Iowa	1315 K St.
JERVIS, C. MARIE	Md.	Fontanet Courts
†JEWETT, ELIZABETH ALICE	N. Y.	214 B St. S. E.
JOESTING, ALICE LILLIAN	Ill.	1858 California St.
*JOHNSON, CATHERINE K.	D. C.	2108 16th St.
*†JOHNSON, ESTHER	D. C.	214 5th St. S. E.
JOHNSON, GEORGE W., JR.	Md.	204 11th St. S. E.
JOHNSON, MARGARET L.	D. C.	1404 Emerson St.
JOHNSON, MINNIE JOSEPHINE	Ill.	2300 18th St.
JOHNSON, ROGER C.	D. C.	1324 Vermont Ave.
JOHNSTON, MARIE A.	Mass.	1929 18th St.
*JOHNSTON, ZADYE	N. Y.	1617 19th St.
*JONASSEN, INGRID	N. Y.	10 Rhode Island Ave.
JOYCE, SARA J. M.	Mass.	L-M Bldg., Govt. Hotels
*JUSTICE, MARGARET	N. C.	2113 Bancroft Place
*KAIN, HELEN GLADYS	D. C.	G. W. U. Medical School
A. B. 1917, George Washington University		
*KALABOKE, KYNAKE LILLIAN	D. C.	637 F St.
KAUFMANN, JAMES L.	Pa.	1135 17th St.
KEEL, SUSIE	D. C.	1316 K St.
*KEESLER, BETTY M.	Conn.	1501 16th St.
*KELIHER, NELLIE M.	D. C.	3455 14th St.
†KELLER, ESTHER MARY	D. C.	736 12th St.
*KELLER, RILLA MAE	Pa.	2126 H St.
KELLY, FLORENCE CLAIRE	Pa.	1014 Vermont Ave.
KEMP, DAISY B.	Mo.	War Risk Bureau
*KENNEDY, DOROTHEA	Wash.	2120 O St.
KERR, NELL W.	N. C.	656 Mass. Ave.
*KESSINGER, MARGUERITE D.	Pa.	2137 LeRoy Place
KESSLER, MARY L.	Ind.	Sherman Apts.
*KIEFER, ALPHA H.	Mont.	3521 14th St.
*KIEFER, CLARENCE M.	Pa.	2113 N St.
KING, MERRILL BARNETT	Ill.	1739 P St.
KIRK, MAY TOWLES	Md.	308 F St.
KIRKPATRICK, MARY REGINA	Mass.	22 R St. N. E.
†KIRSCHNER, SAMUEL	D. C.	1439 Chapin St.
*KLAUSER, EDNA MARIE	Ill.	1307 29th St.
*KLAUSER, GENEVA LUCILLE	Ill.	1307 20th St.
KLEPINGER, EDITH M.	Ill.	Monmouth Hotel
KNISELY, EDNA	Ind.	130 12th St. S. E.
†KOCHY, GENEVIEVE	Mich.	1113 11th St.
KRAL, GEORGIANA	D. C.	1814 Kilbourne Place
†KRAMER, CHARLES		
FREDERICK, JR.	Md.	College Park, Md.
KRIDER, IDA FRANK	Kansas	1362 Newton St.
†KRIENHAGEN, INEZ M.	Ind.	1416 K St.
*KROTZER, MARGARET E.	Iowa	1712 17th St.
KUHLMAN, WILLIAM D.	Va.	1938 Biltmore St.
†KUSCHKE, LILLIAN B.	Texas	3701 14th St.

KUTZ, MIRIAM L.	Ind.	1227 15th St.
LADD, MARY B.	D. C.	1781 Columbia Road
*LAMBERT, AILEEN J.	N. Y.	2540 14th St.
*LANCASTER, OLIVE	W. Va.	201 Tenn. Ave. N. E.
†LANCASTER, RUTH ELLEN	Ill.	X-Y Bldg., Govt. Hotels
†LANDER, KATHRYN DOUGLAS	Ky.	217 Falkstone Courts
LANE, MABLE	Wash.	E-F Bldg., Govt. Hotels
LANGWORTHY, DORIS W.	D. C.	1424 Madison St.
†LARSEN, ARNOLD CONRAD	D. C.	Marine Barracks
*LARSON, EVE PEARLE	Ill.	1929 Calvert St.
LASKER, DAVID HAROLD	Mass.	The Maury
A. B., 1919, Boston University		
*LATIMER, BLANCHE	Mo.	1100 New Hamp. Ave.
†LATIMER, MARGARET E.	Md.	U. S. Geological Survey
*LAURENCE, ELSIE H.	Canada	41 Girard St. N. E.
LAW, ADA COOPER	Fla.	706 11th St.
†LAWSON, EDWARD BURNETT	D. C.	206 13th St. N. E.
LEAHY, EMELIA A.	Ill.	1705 13th St.
*LEGGETT, FLORENCE M.	Md.	104 Raymond St., Chevy Chase, Md.
*LEHMANN, MARIE C.	D. C.	420 East Capitol St.
LEIGHTON, SARAH JANE	D. C.	2141 Wyoming Ave.
LENNON, JESSIE M.	Pa.	10 Rhode Island Ave.
*LESLIE, RUTH	Miss.	1740 K St.
LESSER, ISADOR	Mass.	925 N St.
*LEVINSON, KATHERINE	D. C.	623 M St.
†LEWIS, CATHERINE DEMILLE	N. Y.	744 Newton St.
†LILE, CAROLYN WORD	D. C.	517 Park Road
LINTZ, DOROTHY	N. Y.	2506 K St.
LITTLE, ANNIE S.	Ohio	R-S Bldg., Govt. Hotels
LIVINGSTON, LOUIS	D. C.	2511 14th St.
*LIVINGSTON, NORA E.	Ore.	X-Y Bldg., Govt. Hotels
LOCKE, VERNIE M.	N. Y.	Clarendon, Va.
*LOCKRIDGE, RICHARD O.	Mo.	1355 Monroe St.
LOCKWOOD, MARY MORRIS	N. J.	1729 H St.
LOHMANN, BLANCHE	D. C.	429 4th St. N. E.
LOHRER, FLORENCE	Ohio	729 3d St. N. E.
LONEY, HOWARD C.	D. C.	712 Rock Creek Church Rd.
*LONG, CARLETON MANSFIELD	Md.	Smithsonian Inst.
LONG, WILLIAM SLAUGHTER	D. C.	621 Lexington Pl. N. E.
LONGFELLOW, ALICE	Neb.	41 Girard St. N. E.
†LOVE, ELLEN L.	Va.	3746 McKinley St.
LOVELESS, RUAH C.	D. C.	1820 K St.
LUCAS, HARRY T.	D. C.	1869 Wyoming Ave.
*LUKENS, DOROTHY H.	D. C.	1721 21st St.
*LUKENS, RUTH ANNA	D. C.	2402 14th St.
†LUTIS, MAUDE	Ky.	1639 W St. S. E.
LYNN, HYLDIA MARIE	Fla.	926 B St. S. W.
*MCCABE, JEANETTE	N. C.	1259 New Hamp. Ave.
*MCCALL, M. PEARL	Idaho	139, Senate Office Bldg.
*MCCANDLESS, IDA	Mo.	2055 Park Road
*MCCARTHY, DEBORAH A.	Va.	Cherrydale, Va.
MCCARTHY, WILLIAM ANTHONY	Va.	Cherrydale, Va.
MCCARTY, ONETA	Wash.	1439 Park Road
*MCCLAINE, ANNA BRADFORD	Mo.	808 Mass. Ave. N. E.
*MCCLELLAND, VESTA G.	Ill.	1424 R St.
*MCCLOSKEY, CATHERINE E.	Okla.	1354 Otis Place

McCLURG, BLANCHE	Ind.	1527 O St.
McCONNELL, MARY GLADYS	Texas	40 T St.
McCREADY, HELEN B.	Canada	1501 11th St.
McCULLY, LETHA M.	Okla.	1337 Park Road
*McELIGOTT, AGNES B.	Ill.	4506 15th St.
*McFADDEN, RENNIE	Pa.	1014 B St. S. E.
†McFARLANE, JENNIE G.	Wis.	1343 Park Road
McGOVERN, J. W.	D. C.	Chatham Courts
†McGOVERN, MARY LOUISE	D. C.	Chatham Courts
McGOVERN, MILTON	D. C.	Chatham Courts
*McINTYRE, EFFIE CAROLINE	D. C.	2006 Columbia Road
McJUNKIN, MAYBELLE	Ala.	3417 Holmead Place
McKELWAY, ALEXANDER		
JEFFREY	D. C.	2071 Park Road
*McKINNEY, MYRNA ESTELLA	Pa.	608 A St. S. E.
†McMULLIN, DELLA MARIE	Ill.	231, The Portner
*McNAMARA, ELIZABETH G.	N. Y.	1350 Monroe St. N. E.
McNULTY, KATHERINE S.	Colo.	323 2d St. S. E.
†MacBRIDE, NELLIE M.	Pa.	601 E St.
†MacDONALD, JUNIUS ROUMAINE	N. C.	1736 G St.
†MacDOUGAL, HELEN A.	Ill.	1321 Belmont St.
*MacINTOSH, LULU M.	D. C.	821 North Car. Ave. S. E.
†MacKEVRICAN, MARGARET	Pa.	487 F St. S. W.
*MACSWEENEY, ELIZABETH		
FRANCES	Mass.	1401 Emerson St.
†MADEIRA, ELIZABETH B.	Ohio	1467 Monroe St.
*MAGEE, DIMPLE	D. C.	1448 Girard St.
MAGIE, HAZEL	Md.	Bethesda, Md.
MAGUE, ETHEL M.	Mass.	1603 G St. S. E.
*†MAHOOD, F. MILDRED	Pa.	1841 Mintwood Place
*MALCOLM, EDWINA ROSE	N. Y.	1840 North Capitol St.
*MALLORY, WALTER L.	Va.	Cherrydale, Va.
MALONEY, EMMA J.	D. C.	The New Berne
MANCHESTER, ANNE J.	Pa.	The Ethelhurst
*MANDERSCHIED, JANE		
TOMPKINS	D. C.	1412 Mass. Ave.
*MANGUM, JAMES EVANS	Ga.	802 21st St.
MANNING, CLYDE A.	Ga.	1306 Euclid St.
MARCUS, IDA F.	Pa.	P-Q Bldg., Govt. Hotels
MARLOW, JOHN HOWARD	D. C.	The Kenesaw
†MARLOWE, MABEL	Okla.	219 A St. S. E.
*MARSH, DOROTHY	D. C.	1446 Fairmont St.
MARSHALL, FLORENCE E.	N. H.	1343 Clifton St.
*MARSHINO, ORA	Ky.	Children's Bureau
*MARTIN, CLARE C.	D. C.	709 Quincy Place
MARTINSON, ELLEN	Minn.	1415 Mass. Ave.
MASON, BESS M.	Ky.	510 Randolph St.
*MASON, FAYE	Ohio	1319 Mass. Ave.
MATHEWS, CLAIRE	Colo.	400 A St. S. E.
*MATTERN, JOHN HENRY, JR.	N. Y.	1314 Mass. Ave.
*MAURER, FLORA K.	Ill.	1412 Chapin St.
MAY, CAROLINE	Ill.	718 19th St.
*MEADE, GEORGE A.	Mass.	The Maury
MEARS, ATHERTON H.	D. C.	3917 Livingston St.
†MELENCIO, JOSE P.	P. I.	2618 Conn. Ave.
*MENZIE, EDNA M.	N. Y.	1652 Park Road
*MERCER, LOUISE M.	Ohio	1319 Mass. Ave.

†MERRILL, BLANCHE E.	D. C.	731 22d St.
†MERRILL, ESTHER IRENE	D. C.	731 22d St.
MERRILL, GWENDOLYN IRENE	Ohio	1764 U St.
*MICHOT, ANNIE EUGENIA	Texas	1812 N St.
MILES, EDITH CAROLINE	Mass.	V-W Bldg. Govt., Hotels
*MILES, MABEL	Mont.	1252 Columbia Road
MILLER, CLAUDIA S.	Va.	337 North Car. Ave. S. E.
*MILLER, ERMA C.	Wis.	3600 New Hamp. Ave.
*MILLER, EVA	Iowa	2506 K St.
†MILLER, HAZEL A.	Neb.	3327 17th St.
MILLER, MAUD L.	Mich.	504 B St. N. E.
*MILLER, RUTH A. D.	Pa.	2120 P St.
MILLS, GRACE E.	Miss.	411c Wardman Park Hotel
†MINICK, ROMAYNE E.	Pa.	1116 Vermont Ave.
MINNIX, CATHERINE	D. C.	1328 Randolph St.
MIX, ANNA E.	Md.	113 Maryland Ave. N. E.
†MIXTER, PAUL	Mich.	1842 Calvert St.
†MOERMAN, LOUIS F.	Pa.	1343 Franklin St. N. E.
MOLSTER, JEAN LAWSON	D. C.	934 Kearney St. N. E.
MON, ORA MAY	Ill.	The Sherman
MONAHAN, ANNE RACHEL	N. J.	2501 Irving St.
*MONAHAN, HELEN F.	D. C.	161 Rhode Island Ave. N. E.
*MONAHAN, J. EDITH	Ind.	A-B Bldg. Govt., Hotels
*MONROE, SARAH AGNES	Va.	1840 Biltmore St.
*MOODY, LUTA M.	Mo.	1323 R St.
*MOORE, C. L.	Tenn.	1735 F St.
*MOORE, JULIA ANNE	Texas	115 I St.
*MOORE, PAUL H.	D. C.	1965 Biltmore St.
*MORAN, EMILY	Calif.	119 C St. N. E.
*MORAN, MARGARET LOUISE	D. C.	1727 Columbia Road
†MOREY, LILVAN C.	Minn.	1412 Crittenden St.
MORGAN, ALETHA JULIA	D. C.	47 Seaton Place
MORGAN, RALPH E.	Pa.	721 Butternut St.
*MOSELEY, ELIZABETH L.	Texas	918 M St.
*MOSELEY, LUCILLE C.	Ky.	1336 11th St.
*MULCAHY, ANNA R.	Pa.	1412 Chapin St.
*MUNRO, CAROLINE WALKER	N. J.	1413 Mass. Ave.
MURPHY, M. REGINA	Mass.	1318 Harvard St.
MURRAY, ESTHER L.	Md.	714 Upshur St.
†MURRAY, THELMA MARIE	Ala.	1631 R St.
MUSE, BENJAMIN	Va.	1833 M St.
*MYERLY, PAULINE	Ind.	The Cordova
†MYERS, BROWNIE P.	Miss.	1116 Vermont Ave.
*†MYERS, GEORGE ALBERT	D. C.	649 Md. Ave. N. E.
†MYERS, RUTH	Ill.	1372 Kenyon St.
†MYERS, TEXIE D.	Miss.	1116 Vermont Ave.
NATHANSON, ESTHER	Va.	1414 12th St.
*NAUCK, OSCAR	D. C.	5808 Georgia Ave.
NAYLOR, MARY BODINE	D. C.	629 12th St. N. E.
NEIDIG, CHRISTINE ESTELLE	Pa.	37 Rhode Island Ave.
*NELSON, CARL HILDING	Mass.	Arlington, Va.
*NELSON, RUTH J.	D. C.	502 E St. N. E.
*NESTROM, MATHILDA	Mich.	2560 University Place
NEUMAN, VIOLA M.	Va.	Clarendon, Va.
*NEWELL, WILLIAM C.	N. C.	2511 14th St.
NEWHOUSE, CHARLES A.	Ind.	214 New Jersey Ave.
NEWHOUSE, PANSY E.	Ind.	214 New Jersey Ave.

NEWHOUSE, RUBY M.	Ind.	214 New Jersey Ave.
NEWMAN, AGNES M.	Va.	3617 New Hamp. Ave.
†NICHOLS, ALICE VIRGINIA	D. C.	517 Rhode Island Ave.
NICHOLS, GRACE D.	Mass.	L-M Bldg., Govt. Hotels
NICHOLS, LOIS	D. C.	4006 New Hamp. Ave.
NICHOLS, STANLEY W.	Ill.	1346 Park Road
NICHOLSON, FAY M.	S. Dak.	1515 Mass. Ave.
NICHOLSON, MARGARET M.	D. C.	1000 Maryland Ave.
NIEMEYER, ERNESTINE	D. C.	1708 Lawrence St. N. E.
NISSSEN, CARL C.	D. C.	4203 Fessenden St.
*NOLAN, TERESA AGNES	N. Y.	Monmouth Hotel
NOLL, HAZEL	Pa.	Y. W. C. A. Silver Spring, Md.
*NORDLINGER, JENNYE	D. C.	3113 N St.
NORRIS, JENNILU	Ga.	31 B St.
NORTHROP, EDYTHE C.	D. C.	Stratford Hotel
NORTON, ANNA BESSIE	D. C.	804 Rhode Island Ave.
*NORTON, GOLDER BARNES	D. C.	804 Rhode Island Ave.
NOURSE, MARGARET R.	Va.	U. S. Geological Survey
NOYES, MARTHA	Pa.	1219 12th St.
*NYE, MABEL A.	N. Y.	2603 Mozart Place
O'CONNELL, MARY	Ind.	809 22d St.
O'DONNELL, MARY A.	Ill.	1430 Longfellow St.
ODSTED, FLORENCE C.	N. J.	3640 11th St.
OGDEN, VIVIAN	Mo.	1436 R St.
*OLIVER, ELSIE MAY	Va.	1447 Girard St.
†OLIVER, ESTELLE ISABEL	Texas	605 P St.
OLSEN, GEORGE L.	Minn.	1829 L St.
*ORMEROD, F. BERNICE	D. C.	4104 4th St.
*ORMEROD, LUCY L.	D. C.	4104 4th St.
†O'ROURKE, CAROLYN	D. C.	1726 Mass. Ave.
OSBORN, ELEANOR RUSSELL	Conn.	1812 H Street
*OSBORN, HARRY ELLIS	Mich.	1624 I St.
OSTER, MARIE V.	Minn.	Rosslyn, Va., R. 1
OVERBEY, DORA	Tenn.	1028 16th St.
OWEN, LOU C.	Tenn.	Blue Triangle House, N. Cap. and E Sts.
OWENS, CLARENCE J., JR.	Md.	Southern Bldg.
*OWINGS, HAZEL E.	Md.	143 D St. S. E.
*PABST, ANNA M.	D. C.	4622 15th St.
*PALMER, CATHERINE I.	D. C.	Wardman Courts, West.
*PALMER, FLORENCE G.	D. C.	812 Upshur St.
*PARENT, CLARA	R. I.	R-S Bldg., Govt. Hotels
*PARK, EVELYN P.	Me.	1621 17th St.
†PARKER, ALICE O.	Ill.	7 Iowa Circle
PARKER, CLARENCE WALTER	D. C.	933 N St.
*PARKER, MARIAN ELIZABETH	N. Y.	2603 Mozart Place
†PARLIER, RUTH	Ill.	1819 G St.
†PATTERSON, ELSIE	D. C.	316 Wardman Courts, West
PATTON, BESSIE	Kans.	1819 G St.
*PAULY, ELMER G.	D. C.	514 Lamont St.
PAYNE, HOWARD S.	Va.	436a Warner St.
†PAYNE, JOHN BYRD	Va.	418 Warner St.
*PECK, FRANCIS PATTISON	D. C.	1448 Fairmont St.
†PECKHAM, WINIFRED A.	Pa.	1841 Mintwood Place
PEES, PEARL LUVERNE	D. C.	1345 Q St.
PIERCE, LOTTIE M.	D. C.	229 Pa. Ave. S. E.
PEPPER, FRANCES W.	D. C.	2006 N St.

†PERDUE, THOMAS F.	D. C.	110 5th St. N. E.
PERKINS, MANLIUS MILLS	Vt.	2211 H St.
†PERRY, HARRY LEO	Iowa	1601 31st St.
PERRY, SHELBY	D. C.	48 G St. S. W.
*†PETERS, DORA C. M.	D. C.	1520 9th St.
PETERS, MAURICE	Wis.	717 8th St. N. E.
PETERSON, LOTTIE J.	Minn.	1133 Allison St.
PETERSON, PHOEBE L. D.	Kans.	2622 11th St.
PHELPS, ANNABELLE WINGATE	D. C.	2641 Garfield St.
PHILBROOK, MARY	N. J.	1730 H St.
†PILCHER, RUTH ELIZABETH	D. C.	2118 18th St.
PITCHER, LOIS	D. C.	3910 McKinley St.
PITTARD, ORELLA	Va.	800 10th St.
PIXLEY, CATHERINE H.	Fla.	119 U St.
PLATE, ETHEL LORENDA	Pa.	511 Columbia Road
PLUMMER, MARGUERITE	Ind.	214 New Jersey Ave.
†POLLOCK, REBECCA	Okla.	1743 Pa. Ave.
*POMEROY, EUGENE C.	N. J.	2023 O St.
*POMEROY, MRS. EUGENE C.	N. J.	2023 O St.
†POPE, CHESTER A.	N. Dak.	2114 G St.
POPE, WALTER HOWARD	Ohio	Y. M. C. A.
†POPESCU, VALENTINE C.	Mo.	724 7th St. S. E.
*PORTER, CHARLES W.	D. C.	1328 Fairmont St.
*PORTER, GLADYS I.	Me.	941 H St.
PORTER, IRIS L.	Ky.	2010 O St.
POSTLEY, OLIVE C.	D. C.	1362 Irving St.
*POWELL, LILLIAN B.	Tenn.	1662 Park Road
*POWELL, MARY L.	D. C.	628 6th St. N. E.
PRENDER, ELIZABETH	D. C.	747 10th St. S. E.
*PRENDERGAST, BERTHA M.	D. C.	1504 12th St.
PRETTYMAN, HAZEL E.	Ohio	1341 Irving St.
*PRIBULA, STEPHANI	Md.	Mt. Rainier, Md.
†PRITCHETT, ETHEL	D. C.	1745 Kalorama Road
PROCHASKA, INEZ M.	Mich.	925 New York Ave.
PURSGLOVE, ELSIE M.	D. C.	1530 25th St.
*PUTNAM, BERTHA A.	D. C.	1231 Talbert St. S. E.
†PUTNAM, PERSIS	Ill.	X-Y Bldg., Govt. Hotels
*QUICK, RUTH G.	D. C.	14 Jackson Place
*QUINLAN, BEATRICE M.	Ohio	1858 Columbia Road
QUIRK, ELLEN M.	D. C.	1332 I St.
RAGAN, ELEANOR M.	Mo.	1431 Newton St.
†RANDALL, KATHERINE C.	Minn.	The Brunswick
RASUL, H. GALUMU	P. I.	Bureau of Insular Affairs
*RAY, RUTH R.	Okla.	Y. W. C. A., Silver Spring, Md.
REBUSCHATIS, MARION	D. C.	3228 Hiatt Place
†REED, ALBERT C.	D. C.	1741 F St.
REED, DORIS M.	Mich.	1936 Calvert St.
†REID, DON C.	Iowa	1404 12th St.
REILEY, ELIZABETH W.	Pa.	1028 16th St.
*REINOLD, BESSIE ENDERS	Ohio	1105 13th St.
*RENSHAW, MARY M.	D. C.	1213 Fairmont St.
*RICE, LOUISE GERTRUDE	D. C.	1012 Spring Road
RICHARDS, FLORENCE LOUISE	Ohio	1209 13th St.
RICHARDSON, JAMES DEE	D. C.	1832 Biltmore St.
†RICHARDSON, WILLIAM W.	D. C.	1121 10th St.
*RICKER, ANNE ELIZABETH	Va.	Rosslyn, Va., R. F. D. No. 4

RICKER, KATE A.	Va.	1009 K St. N. E.
RICKETTS, CHARLES W., JR.	D. C.	1742 F St.
*RIDER, INA G.	D. C.	1254 Irving St.
RIGHTER, MARY Y.	D. C.	717 H St.
*RIORDAN, AGNES	D. C.	3114 18th St.
ROBBINS, ELIZABETH	Colo.	E-F Bldg., Govt. Hotels
†ROBERTS, ANNIE P.	Va.	1612 King St., Alexandria, Va.
ROBERTS, BESSIE M.	Kans.	1341 Otis Place
ROBEY, GRACE HELEN	Md.	2118 G St.
ROBINSON, MARGUERITE	Colo.	2560 University Place
ROBINSON, M. EDITH	D. C.	1415 Park Ave.
*RODRIGUEZ, TERESE	D. C.	814 22d St.
*ROGERS, DAISY L.	Miss.	1105 O St.
*RONALD, MARJORIE C.	Ill.	2137 LeRoy Place
*RONNDEY, FLORENCE E.	D. C.	Wardman Courts, East
*RORER, EULA	D. C.	1800 K St.
ROSE, HELEN TRENT	Md.	Hyattsville, Md.
ROSE, MYRTLE B.	Vt.	1905 15th St.
ROSENBLOOM, SARA R.	Pa.	20th and Florida Ave.
†ROUECHE, WILLIAM N.	Pa.	Georgetown Univ.
ROYER, ALBERT T.	Ohio	1202 N St.
*RUNKLE, EVELYN CAROLYN	Ohio	223 Rock Creek Church Rd.
RUPERT, PEARL P.	D. C.	539 21st St.
RUSSE, LUCY	Ohio	1105 East Capitol St.
*RUSSELL, EUGENE W.	Va.	Iowa Circle
†RUSSELL, MARY PORTER	Tenn.	1320 21st St.
*RYLAND, ROBERT A.	Va.	1204 O St.
*SALQUIST, EDITH CAROLYN	Calif.	449 Luray Place
SAMUELS, LEROY T.	D. C.	1925 35th St.
†SARGENT, ANNIE M.	D. C.	1749 18th St.
SAUNDERS, FLORENCE M.	Texas	2276 East Capitol St.
*SAVAGE, ROBERT W.	D. C.	623 Maryland Ave. N. E.
*SCHARF, JOHN G.	D. C.	3411 Brown St.
*SCHIFFER, MARIE V.	Mich.	U. S. National Museum
†SCHILLER, MILFORD	D. C.	1328 Quincy St.
SCHOFIELD, E. ELEANOR	Va.	3501 14th St.
*SCHOLEN, HANNA	Wash.	2002 G St.
†SCHOOLER, YETTA BETTY	D. C.	624 4½ St. S. W.
SCHREFFER, BERTHA	Calif.	1909 North Capitol St.
SCHUBERT, AILEEN	D. C.	219 East Capitol St.
*SCHUKRAFT, INEZ VIVIAN	Ind.	1350 Irving St.
SCHUTZ, NICOLAS	D. C.	1750 M St.
*SCHWARTZ, ROSE	N. Y.	1440 Meridian Place
SCOTT, ALICE B.	Md.	2554 University Place
*SCULLY, GENEVIEVE	N. J.	1833 M St.
†SEAMANS, GLADYS B.	Ill.	119 C st. N. E.
SESTA, JOSEPH	N. J.	707 22d St.
SEVERSON, PAUL ALBERT	Mo.	2014 G St.
SHAFER, WILLIAM	N. Y.	1430 V St.
†SHAFFER, VERNY M.	Pa.	1305 Rhode Island Ave.
SHAH, PAN FRANCIS	China	2001 19th St.
*SHAW, ELIZABETH M.	Md.	234 E st. N. E.
*SHAW, JOSEPHINE	N. Y.	P-Q Bldg., Govt. Hotels
SHEA, MARY FRANCIS	D. C.	732 Morton St.
*SHEPHERD, MARGUERITE	D. C.	2011 F St.
SHELDRAKE, MARY OSWALD	Pa.	338 10th St. N. E.

SHIPLEY, CARRIE H.	D. C.	1467 Irving St.
†SHIVELY, EVA THAYER	D. C.	3121 Mt. Pleasant St.
*SHORT, IDA	S. Dak.	1204 N St.
SHOWERS, ESTHER M.	Wash.	931 H St.
*SHROPSHIRE, JUANITA	Texas	1819 G St.
†SIMMERS, ROBERT L.	Pa.	505 2d St.
SIMON, LOIS JOSEPHINE	D. C.	1414 Girard St.
†SIMPKINS, DOROTHY K.	Neb.	1800 New Hamp. Ave.
SIMPSON, GRACE E.	Mass.	1439 T St.
*†SINGLETON, INA DUVALL	D. C.	2020 H St.
SIX, FRANCIS G.	Ill.	1819 Kalorama Road
*SKRONDAL, ALICE	Wash.	1819 G St.
SLAYBACK, LUCILE	Ark.	N-O Bldg., Govt. Hotels
SMITH, ALICE CORNELIA	Conn.	3242 38th St.
*SMITH, DAVID PRESTON	D. C.	3145 Mt. Pleasant St.
*SMITH, ELSIE C.	D. C.	1363 Spring Road
*SMITH, FLORENCE J.	Iowa	1712 17th St.
SMITH, HAZEL E.	Ind.	G-H Bldg., Govt. Hotels
SMITH, HELEN	Wis.	36 W St.
†SMITH, HELEN C.	D. C.	1209 B St. N. E.
SMITH, ISABELLE GEDDES	D. C.	Portland Hotel
SMITH, J. VIRGINIA	Pa.	428 10th St. N. E.
SMITH, MARIANA	Ky.	1432 M St.
SMITH, MARY P.	D. C.	1315 Clifton St.
SMITH, SUSIE C.	Me.	1842 2d St.
†SMITH, THERESA BRICK	D. C.	3401 16th St.
SNELL, NINA M.	Kans.	1428 Newton St.
*SNODGRASS, WILLIAM E.	Ill.	1804 Kilbourne Place
SOKOLOV, HARRY E.	D. C.	32 Q St.
SOUTHWELL, MARIE C.	Ill.	2138 California St.
*SOUTHWICK, ADELAIDE	D. C.	1226 Pa. Ave. S. E.
SOWERSBY, ORA	D. C.	Natl. Zoological Park
*SPRUCE, SAMUEL STUART	D. C.	1669 Columbia Road
STAGER, CECIL GAYMAN	D. C.	419 Quincy St.
†STANBACK, LESTER	Miss.	1104 Vermont Ave.
STARR, Relda A.	N. Y.	120 Randolph St.
STEIN, HATTIE	D. C.	Concord Apts.
*STERNER, HOPE R.	Pa.	3465 14th St.
STEVENS, JAMES EDELBERT	Ind.	2134 H St.
*STEVENS, MARY C.	D. C.	1333 F St.
*STEVENSON, MARJORIE	D. C.	1812 Ingleside Terrace
†STEVENSON, MAURICE S.	Kans.	Walter Reed Hospital
STEWART, ALMA TIFFANY	Va.	1709 Q St.
STEWART, EUGENE WILSON	Ill.	1831 Vernon St.
STEWART, GRACE	W. Va.	2 I St.
STIMMEL, BESS E.	Mich.	1443 Belmont St.
*STINE, (MRS.) OSCAR C.	D. C.	3810 Keokuk St., Chevy Chase, D. C.
*STOEN BENNETT A.	Minn.	422 2d St.
STONE, CLARA S.	Ky.	1414 K St.
†STONE, EDNA L.	D. C.	1618 Rhode Island Ave.
STONE, MARY PACCIARINI	D. C.	Colorado Bldg.
STONEBRAKER, FLORENCE E.	D. C.	3433 Oakwood Terrace
STRATBUCKER, LOUISE	Neb.	G. W. U. Hospital
*STRAWN, ELLA E.	Md.	Landover, Md.
STRONGIN, HERMAN F.	D. C.	1736 G St.
STUARD, MABEL E.	D. C.	2118 I St.

*STUDDS, CLARA R.	D. C.	1409 New Jersey Ave.
†STYLES, ELIZABETH MORGAN	Va.	Falls Church, Va.
SUIT, ARTHUR M.	Mich.	Continental Trust Bldg.
†SULLIVAN, FLORENCE	Pa.	1304 Shepherd St.
SULLIVAN, JAMES FRANCIS	Mass.	502 First St. S. E.
†SUMMERS, PAUL D.	Wash.	1316 Euclid St.
*SUTHERLAND, VIRGINIA B.	W. Va.	2119 Conn. Ave.
SUTTON, DON F.	D. C.	2013 G St.
SWAIN, CHRISTINE	N. Y.	310 Indiana Ave.
SWANSON, EDNA M.	Minn.	1351 Otis Place
SWETT, VIRGINIA	D. C.	15 Grafton St., Chevy Chase, Md.
SWITZER, BESSIE	D. C.	3517 13th St.
*TALLENT, ROXIE E.	Tenn.	1405 G St. S. E.
TAPLEY, GLADYS	D. C.	233 Tenn. Ave. N. E.
*TAYLOR, BLANCHE	Ill.	21 First St.
†TAYLOR, DOROTHY E.	D. C.	2534 13th St.
TAYLOR, ELLEN M.	Tenn.	1028 16th St.
TECH, RUTH E.	Ind.	P-Q Bldg., Govt. Hotels
TEILLARD, DOROTHY L.	D. C.	131 A St. N. E.
TERRELL, WILLIAM PRESCOTT	D. C.	917 18th St.
*THOMAS, GRACE DEBORAH	D. C.	456 M St.
*THOMAS, LILLIE M.	D. C.	626 Park Road
THURLBY, GLADYS LEONE	Ohio	The Plaza
THURSTON, CLARENA N.	N. Y.	1525 First St.
*TITUS, HELEN E.	Pa.	2014 F St.
*TODHUNTER, EUGENIA H.	D. C.	1822 16th St.
†TOWERS, KATHERINE M.	N. Y.	2509 17th St.
TOWSLEY, ALICE M.	Me.	1258 Columbia Road
*TREANOR, HONORIA SAPELO	Ga.	1436 N St.
TREIMAN, MARTHA	Pa.	P-Q Bldg., Govt. Hotels
TROTT, FLORENCE	Ill.	1350 Monroe St.
†TRUE, MABEL M.	Iowa	1706 Rhode Island Ave.
TRUNDLE, MAY H.	D. C.	1409 Webster St.
*TULLY, MARGARET R.	Vt.	1342 13th St.
TUOHY, ANNA	N. Y.	413 2d St.
TURNER, MABEL L.	Wash.	314 Rutland Courts
TURNER, PATTIE MANGUM	D. C.	506 East Capitol St.
*TYDINGS, MARY L.	D. C.	1516 P St.
*TYREE, ELIZABETH RIGBY	D. C.	1328 Maryland Ave. N. E.
*UMHAU, CHRISTINE K.	D. C.	3305 16th St.
*UMHAU, KATHERINE S.	D. C.	3305 16th St.
*UNRUH, JUNE M.	Kans.	130 Adams St.
*VANCEAVE, DORA M.	Colo.	1200 Mass. Ave.
*VANDALEN, LILLIAN I.	Ind.	X-Y Bldg., Govt. Hotels
VAUGHAN, WILLIAM E., JR.	D. C.	2015 First St.
VELIE, EDNA M.	N. Y.	1235 Girard St.
*VESTAL, RUFUS M.	D. C.	309 Shepherd St.
VINCEL, EDNA B.	Va.	Federal Trade Com.
†VINCENT, WALTER J.	Md.	2026 G St.
VOELKER, ARTHUR H.	D. C.	1439 Rhode Island Ave.
†VOGT, GRACE K.	Ohio	132 C St. N. E.
VOIGT, ANNA M.	S. Dak.	3640 11th St.
VORHALE, EMMA H.	Wis.	The Cordova
*WADLEY, ANNA	Ga.	1817 F St.
*WALKER, ANN M.	D. C.	1363 Fairmont St.
WALKER, EFFIE L.	Miss.	223 Florida Ave.

WALLACE, BRYAN E.	D. C.	521 Shepherd St.
*†WALLACE, MARION	Md.	6402 Ridgewood Ave., Chevy Chase, Md.
WALTERS, MARY JANE	Va.	1633 29th St.
WARD, IDA C.	Pa.	1326 Mass. Ave.
†WARFIELD, EDGAR ASHBY	Va.	501 King St., Alexandria, Va.
WARK, LILLIAN W.	Mo.	C-D Bldg., Govt. Hotels
*WARNEHE, CORNELIA A.	Ill.	2120 G St.
†WARNER, ANNA P.	D. C.	2001 16th St.
WARREN, CHRISTINE	Ky.	1008 Mass. Ave.
WARREN, LULA KADREY	D. C.	915 L St.
WATKINS, MARIE O.	D. C.	155 Kentucky Ave. S. E.
*WATTS, GLADYS	Mo.	322 Maryland Ave. N. E.
WEAVER, SUE E.	N. C.	1346 Fairmont St.
WEBB, MARION ALICE	D. C.	1400 Fairmont St.
WEBB, VIRGINIA JOHNS	Va.	1014 Vermont Ave.
WEBSTER, ELEANORA C.	D. C.	104 5th St. N. E.
*†WEED, CONSTANCE	N. Y.	1495 Newton St.
*WEEKS, SALLIE PRESTON	D. C.	3445 Newark St.
WEINBERG, LENORA	D. C.	433 2d St. S. E.
WEISS, HYMAN L.	D. C.	General Land Office
†WELLS, EDNA BARRON	Tenn.	R-S Bldg., Govt. Hotels
WELLS, F. ESTELLE	Tenn.	1434 Harvard St.
WELLS, LESLIE G.	D. C.	1227 Girard St.
WELLS, MARIE	Mo.	417 Randolph St.
WELLS, MARY ELIZABETH	Ohio	1341 Irving St.
WEST, RENA B.	D. C.	224 3d St. S. E.
WETZEL, ELSIE AMELIA	Ill.	4411 39th St.
WEYL, CELESTE MARIE	Ill.	1230 Mass. Ave.
*WHEATLEY, CHARLES FELLOWS	D. C.	1330 Florida Ave.
†WHEELER, CATHERINE	Pa.	I-K Bldg., Govt. Hotels
WHEELER, MAUD INEZ	Mich.	2831 Georgia Ave.
†WHITAKER, CLONA	Ind.	1407 Perry Place
†WHITE, RUTH MARIETTA	R. I.	905 East Capitol St.
*WIDMEYER, YOLANDE	Va.	The Rochambeau
†WIESER, FLORENCE W.	D. C.	1307 Columbia Road
WILDERMUTH, NORMA	Ohio	1524 A St. N. E.
*WILKEN, CEDAR B.	N. Y.	1715 North Capitol St.
WILKIE, ROBERT TUSCH	Ind.	1219 I St.
*†WILLCOX, EMMA P.	D. C.	The Thomas
WILEY, MAUD S.	D. C.	1840 Vernon St.
WILLIAMS, EARLINE B.	N. J.	1401 31st St.
WILLIAMS, ESTHER L.	N. Y.	Lanham, Md.
*WILLIAMS, FLORENCE V.	Ky.	L-M Bldg., Govt. Hotels
WILLIAMS, HAZEL F.	Ind.	G-H Bldg., Govt. Hotels
WILLIAMS, JOHN HIGGINS	Ky.	1443 Mass. Ave.
WILLIAMS, LUELLA L.	N. Y.	910 6th St. N. E.
*WILLIAMS, MARGERY	Mich.	1855 Calvert St.
WILLIAMS, MATHILDA DOROTHEA	D. C.	1332 F St. N. E.
WILLIAMS, MAUD	Ill.	1318 Harvard St.
WILLIAMS, PRISCILLA	Va.	1836 Ontario Place
WILLIAMS, THOMAS H.	D. C.	1215 Vermont Ave.
WILSON, HAZEN H.	D. C.	4004 Georgia Ave.
WILSON, JAMES L.	Me.	1415 K St.
WILSON, LELIA CHARLOTTE	D. C.	2007 G St.

*WILSON, LILLIAN RUTH	Ark.	P-Q Bldg., Govt. Hotels
WILSON, RUTH M.	Ind.	4 Quincy Place N. E.
WILTON, RALPH WILLIAM	D. C.	1335 22d St.
*WIMBER, VERN	D. C.	1213 K St.
WINDRIDGE, EMMA ISABELLA	Va.	Cherrydale, Va.
*WINGATE, EDWARD GREENE	D. C.	1701 Park Road
†WOEFLIN, MARTHA	Ky.	1022 11th St.
WOMERSLEY, GRACE M.	D. C.	4122 8th St.
†WOOD, JOSEPH R.	D. C.	3143 24th St. N. E.
WOODBURY, MARGARET BARKER	D. C.	3122 Q St.
*WOODWARD, ALMA L.	D. C.	1916 G St.
†WORDEN, STANLEY	Md.	1237 Kenyon St.
†WORMSER, HAZEL M.	Kans.	1342 Vermont Ave.
WRIGHT, ETHEL	Va.	229 Rock Creek Church Rd.
*WRIGHT, MARY BENTON	D. C.	1205 Columbia Road
WUEST, CLARA I	Ohio	101 N. Car. Ave. S. E.
WYMORE, IVY O.	D. C.	1724 Park Road
YOSGOUR, SONIA S.	D. C.	300 E St. N. E.
YOUNG, EMMA I.	Md.	154 East Capitol St.
*YOUNG, LOUISE B.	Va.	2129 18th St.
*YOUNG, MATILDA N.	D. C.	2129 18th St.
YUNG-KWAI, BURNHAM	D. C.	3312 Highland Ave.

COLLEGE FOR ENGINEERING

CANDIDATES FOR DEGREES

ALLARDT, ERNST WILLIAM (M. E., 0)	Ohio	2325 L St.
AMAN, WALTER FRANK (E. E., 85)	Md.	Mt. Rainier, Md.
ANDERSON, JOHN AUGUSTA (C. E., 26)	D. C.	1520 E. Capitol St.
AULTMAN, DWIGHT EDWARD J (Ch. E., 28)	D. C.	705 Northumberland Apt.
AURYNGER, JOHN J. (E. E., 0)	N. Y.	1908 H St.
BABCOCK, EARL (C. E., 0)	Ill.	1331 Vermont Ave.
BAGDER, CECIL HAMMOND (Chem., 122)	Pa.	Hyattsville, Md.
BAILEY, EMMETT CHESTER (M. E., 62) B. S. 1916, Beloit College	Wis.	1849 Ontario Place
BAILEY, WILLIAM HIRAM (Chem., 19)	Texas	2106 First Street
BAUSKETT, HELEN V. (Chem., 28)	D. C.	1201 Girard St.
BENSON, RUSSELL BERNARD (M. E., 16)	D. C.	1406 21st St.
BERLINER, JULIUS FREDERICK THOMAS (Ch. E., 22)	D. C.	1471 Irving St.
BERRYMAN, NALLS (Chem., 6)	D. C.	40 Chestnut St., Takoma Park, D. C.
BERTELSON, CHARLES WESLEY (E. E., 0)	N. D.	House Office Bldg.
BIEBER, OSCAR PETER (M. E., 0)	D. C.	1239 4½ St. S. W.
BIGGS, ZENO ALVIN (E. E., 108)	Ind.	1730 Euclid St.

BIRCH, ALVIN LLOYD (C. E., 17)	D. C.	1635 R St.
*BISER, LEON WINDSOR (Ch. E., 0)	Md.	1916 16th Street
BITTNER, GUSTAVE EMIL (M. E., 0)	D. C.	2014 2d St.
BLACKMAN, CYRENE E. (Chem., 45)	Ind.	209 S St.
BLAKELY, CHAS. FRANCIS (C. E., 109)	Nebr.	Y. M. C. A.
*BLAND, WILLIAM BENJAMIN (C. E., 0)	S. C.	455 First St. S. E.
BLEWITT, JOHN JUSTIN (C. E., 0)	Pa.	1352 Irving St.
BLINSTON, CHESTER A. (M. E., 0)	D. C.	1527 Newton St.
*BLOSK, EDWIN ARTHUR (M. E., 28)	D. C.	744 Quebec St.
*BONDURANT, JOHN CHARLES (E. E., 0)	Fla.	Chatham Courts
BONEBRAKE, GEORGE DANIEL (C. E., 30)	Ohio	5210 Illinois Ave.
BOYD, ALAN ROCKWELL (C. E., 0)	D. C.	1441 Chapin St.
BOYD, JOSEPH REGINALD (E. E., 31)	D. C.	1360 Parkwood Place
BOYDEN, ROGER TALBOT (C. E., 108)	Mass.	206 Southbrook Courts
*BRADBURN, JOHN RAYMOND (M. E., 0)	D. C.	Navy Yard
BRADBURY, CRAIG E. (E. E., 0)	D. C.	1843 Lamont St.
BRADSHAW, MAX ABRAHAM (Ch. E., 4)	Va.	1701 Euclid St.
BRADY, JOHN BERNARD (E. E., 117)	Md.	Chevy Chase, Md.
BRANDES, CLARENCE ALFRED (C. E., 20)	D. C.	2032 16th St.
BRAUNER, RALPH HERMAN (E. E., 53)	D. C.	Brookland, D. C.
BREWER, NATHANIEL (M. E., 0)	D. C.	421 6th St. S. E.
BRUCE, CLARENCE SMOOT (M. E., 18)	D. C.	2601 11th St.
*BURDETTE, ROBERT C. (Chem., 26)	Md.	1611 First St.
BURGGRAP, FRED (Ch. E., 0)	Ohio	3917 Livingston St.
BURK, PAUL WILLIAM (M. E., 15)	D. C.	1322 5th St.
*BURNER, CHARLES ALEXANDER (C. E., 34)	D. C.	5322 41st St.
BURNESTON, JOSEPH LEE (C. E., 39)	D. C.	1460 Newton St.
BUSSARD, MARCEL JULIEN (C. E., 0)	D. C.	2129 G St.

CAMPBELL, RICHARD DODGE (E. E., 79)	D. C.	42 Rhode Island Ave. N. E.
CAREY, JOHN JOSEPH (Arch., 34)	D. C.	2202 First St.
CARTER, ROBERT COX (C. E., 0)	Ind.	3512 10th St.
CHRISTIAN, WELLNER LIVINGSTONE (M. E., 12)	D. C.	15 T St. N. E.
CLARKE, BEVERLY LEONIDAS (Chem., 48)	D. C.	2127 G St.
*CLARKSON, HARRY IRVING (M. E., 13)	D. C.	707 G St. S. E.
*CLAYTON, HAROLD OLIVER (Ch. E., 39)	D. C.	8 Girard St. N. E.
CLINTON, DANIEL JOSEPH (C. E., 0)	Pa.	1629 Newton St.
COBB, ELVIN T. (C. E., 0)	Mo.	115 C St.
*COCKRILL, LAWRENCE P. (C. E., 0)	Ky.	1117 New Hampshire Ave.
COLE, FRANCIS GRUELLE (M. E., 46)	D. C.	1900 8th St.
*CONBOYE, WILLIAM THOMAS (Arch. 74)	Calif.	64 U St.
*COOK, HAROLD P. (E. E., 0)	Iowa	234 N St.
COREY, GEORGE HOLTON (Chem., 54)	Pa.	1511 Lamont St.
COVERT, ROY NORTON (M. E., 39)	Ill.	2821 27th St.
COX, EUGENE SHEFFIELD (M. E., 7)	Wash.	10th St. and Mass. Ave.
CROSS, FRED SYLVESTER (Chem., 56)	W. Va.	1100 Vermont Ave.
CRUICKSHANKS, BENJAMIN CARPENTER (M. E., 132)	D. C.	1336 Fairmont St.
DAIDY, GEORGE AUGUSTINE (Arch., 56)	Mass.	1682 Irving St.
DALE, LLOYD EMERSON (Ch. E., 25)	Neb.	2032 F St.
†DALY, ADOLPH A. (C. E., 19)	D. C.	914 Maryland Ave. N. E.
DARCEY, STANLEY RODERICK (C. E., 4)	D. C.	1248 31st St.
*DASHER, CHARLES LAMER, JR. (M. E., 0)	D. C.	5110 13th St.
DAVIDSON, WILBUR DELOZIER (C. E., 39)	D. C.	1807 Good Hope Road S. E.
*DAVIS, FRED (C. E., 0)	D. C.	3030 Q St.
DAVIS, THOMAS ALLAN (Ch. E., 66)	D. C.	635 Eye St. S. W.
*DAWSON, ALAN BENNETT (C. E., 0)	D. C.	1412 E St. S. E.
DEGENER, EDWARD L. (C. E., 22)	Ill.	733 22d St.

DELANY, JAMES LEROY (M. E., 30)	D. C.	600 Park Road
DELAUDER, JOHN LURMAN (Chem., 10)	D. C.	1359 Mass. Ave.
†DEMPSEY, JAMES BRYAN (M. E., 15)	Kans.	1223 K St.
DERRICK, JOHN MILTON (M. E., 6)	Md.	1014 10th St.
DISNEY, LINDSAY PETTIT (M. E., 35)	D. C.	1212 B St. S. E.
DUMM, EDWIN J. (M. E., 0)	Ohio	153 A St. N. E.
*DURAND, CHARLES SCHAD (Chem., 0)	Tenn.	Y. M. C. A.
DUTTON, HAROLD HARRISON (C. E., 36)	D. C.	1721 Kilbourne Place
*DYER, WORDEN POPE (M. E., 0)	D. C.	329 13th St. S. E.
EDWARDS, LIEUT. RAY OMER (C. E., 59)	Ill.	Walter Reed Hospital
EDWARDS, THOMAS RIVES (Arch., 73)	D. C.	4209 Ill. Ave.
EISINGER, JOHN OVERTON (M. E., 19)	D. C.	3503 Wisconsin Ave.
ELIASON, HOWARD RUSSELL (M. E., 0)	D. C.	1314 Columbia Road
ELLERBROCK, JOHN HARRY (M. E., 2)	D. C.	1317 Rhode Island Ave.
ENGEL, FRANCIS HERMAN (E. E., 0)	D. C.	1108 Columbia Road
ERGOOD, ALLEN MONROE (Ch. E., 16)	D. C.	6223 9th St.
FEDDE, WALTER CARL (Chem., 93)	Colo.	201 Eye St.
FEAGAN, LUKE JOSEPH (M. E., 0)	D. C.	3210 13th St.
*FIRE, ALBERT JOSEPH (Ch. E., 99)	Ky.	1761 Park Road
†FILGATE, JOHN THOMAS (C. E., 40)	D. C.	2451 18th St.
FINNIE, ALEXANDER (C. E., 4)	D. C.	4417 Ord St. N. E.
FISHER, HENRY PHILIP (C. E., 0)	D. C.	1847 Ontario Place
*FLANAGAN, SAMUEL CODRINGTON (C. E., 0)	Va.	1708 P St.
FLEMING, EUCLID STORY JR. (M. E., 10)	D. C.	127 6th St. S. E.
*FOSTER, ROYAL E. (Chem., 22)	D. C.	1914 I St.
†FRED, ROGERS M. (Arch., 0)	D. C.	1733 Columbia Road
FREE, WALTER HENRY (M. E., 26)	Iowa	Y. M. C. A.
*FRIDINGER, NORMAN SCOTT (Ch. E., 0)	D. C.	301 13th St. S. E.

FRIEDMAN, SOLOMON (C. E., 33)	D. C.	447 7th St. S. W.
FUQUA, DELMOUR JOHN (Ch. E., 0)	D. C.	1415 Monroe St.
*GALLAHAN, WILBUR ANDREWS (C. E., 0)	D. C.	421 L St. S. E.
*GALLOWAY, ALEXANDER GORDON (M. E., 0)	D. C.	7106 Piney Branch Road
*GARDNER, HANNAH LOUISE (Chem., 51)	D. C.	3367 18th St.
GARMAN, GEORGE GUY (E. E., 5)	Pa.	2031 2d St. N. E.
*GARNER, NELSON (C. E., 0)	Ariz.	1537 I St.
GARTSIDE, FRANK TYLER (C. E., 59)	Md.	1012 12th St.
GATCHELL, WILLARD WADDINGTON (Chem., 10)	D. C.	3209 19th St.
GEBHART, ARTHUR I. (Chem., 66)	Pa.	2127 G St.
*GERSHANICK, CARL (E. E., 4)	D. C.	2211 N St.
*GIEGERICH, ALBERT A. (C. E., 0)	Iowa	1526 O St.
*GILL, GEORGE JAMES (C. E., 0)	D. C.	730 Shepherd St.
GILTRUD, ESTHER AGNES (Arch., 24)	N. D.	1357 Montague St.
GIROUARD, PHILIAS HENRY (E. E., 0)	R. I.	100 B St. N. E.
GLYCOFRIDES, EUSTACE (Chem., 26)	D. C.	926 9th St.
GONZALEZ, WILLIAM ALEXANDER (Chem., 34)	N. Y.	200 E St.
GOODALL, ALFRED BURROWS (E. E., 32)	D. C.	1824 Ingleside Terrace
GOSS, MARSHALL J. (Chem., 0)	Ohio	416 Kenyon St.
GRAHAM, DANIEL PARSONS (Ch. E., 16)	Calif.	12 Rhode Island Ave. N. E.
GRAHAM, GEORGE EMLIN (M. E., 10)	D. C.	2246 Cathedral Ave.
GREELEY, ARTHUR EDWARD (E. E., 8)	D. C.	2632 Garfield St.
*GREEN, EDGAR MELBOURNE (M. E., 5)	D. C.	82 V St.
GREENWOOD, AUDLEY HERBERT (M. E., 0)	Md.	1225 Euclid St.
GROSSMAN, HERBERT ROBERT (C. E., 38)	Ky.	P. O. Box 1470
GUMPRECT, ARMAND J., JR. (M. E., 6)	D. C.	2818 P St.
HAMMOND, LEIGH MEAD (C. E., 0)	Md.	Boyd and Carroll Ave., Takoma Park, Md.
HANKS, REUEL MUCKLOST (E. E., 0)	W. Va.	1541 8th St.

HARDING, RAYMOND BARTON (E. E., 118)	Va.	625 G St. S. W.
†HARPER, ESMONDE (M. E., 8)	D. C.	803 Allison St.
HARRINGTON, GEORGE ELLIOTT (Chem., 8)	D. C.	4641 Conduit Road
HARRIS, P. RAY (E. E., 0)	Ill.	153 A St. N. E.
HARRIS, WILLIAM (Arch., 0)	D. C.	1505 Lamont St.
HARRISON, ARTHUR P. (Chem., 33)	D. C.	816 18th St.
*HARSCH, RAYMOND (C. E., 93)	Ohio	1 Girard St. N. E.
HARTMAN, ARTHUR MEYER (Ch. E., 22)	D. C.	1414 Girard St.
HATTON, WESLEY LEONARD (E. E., 0)	Ala.	710 Rock Creek Church Rd.
HAWKINS, WALTER (Chem., 0)	Conn.	702 H St.
†HAYNES, JOHN LENNIES (C. E., 0)	D. C.	1347 Q St.
*HAYNES, WILLIAM E. (M. E., 0)	N. Y.	214 7th St. N. E.
HECKERT, GEORGE THEODORE (E. E., 11)	W. Va.	2030 G St.
HEID, EDWIN DEWEY (M. E., 4)	D. C.	1740 Lanier Place
HEIST, LEROY ERNEST (M. E., 17)	D. C.	2415 N. Capitol St.
HELLMUTH, EVERETT ALBERT (Ch. E., 76)	Va.	108 N. Alfred St., Alexandria, Va.
HENKIN, BENJAMIN (Ch. E., 0)	D. C.	700 4th St. S. E.
*HEPBURN, NORMAN C. (M. E., 0)	D. C.	321 5th St. S. E.
HILL, HUGH PALMER, Jr. (C. E., 23)	D. C.	313 A St. S. E.
HILLIG, FRED H. (Chem., 44)	Ill.	Bureau of Steam Engineering, Navy Dept.
HOMAN, LESTER STANLEY (E. E., 0)	Ohio	173 U St. N. E.
HOWISON, RAYNOR (E. E., 4)	D. C.	811 Jefferson St.
HUFNAGEL, HARRY MILLER (E. E., 41)	D. C.	1311 6th St.
HUME, JAMES PICKRELL (Ch. E., 0)	D. C.	2113 S St.
HUMPHREY, OMAR CONGER (C. E., 0)	D. C.	1271 First St. S. E.
HUNT, MARY ELEANOR (Arch., 0)	D. C.	106 9th St. S. E.
JAVELLANA, JOSE B. (E. E., 17)	P. I.	1414 11th St.
†JETT, JAMES MALCOLM (C. E., 0)	D. C.	5324 Illinois Ave.

*JOHNSON, HAROLD CURRY (Ch. E., 20)	Fla.	1449 Rhode Island Ave.
JOHNSTON, RUBY PAULINE (M. E., 0)	D. C.	314 2d St. N. E.
*JONES, LESLIE O. (E. E., 27)	Ohio	Ballston, Va.
*KAIN, DONALD EDWARD (C. E., 0)	D. C.	129 E St.
KAMPE, ALBERT HENRY (C. E., 31)	Mich.	1002 M St.
KAR, PERCY A. (E. E., 0)	Utah	2622 11th St.
KARGER, ALFRED GUS (Chem., 35)	Ohio	2616 Cathedral Ave.
KEATING, MICHAEL JOSEPH (M. E., 14)	N. J.	1011 Otis Place
*KENNEDY, ERROLL ANGLIN (Chem., 0)	Md.	Hyattsville, Md.
*KLINE, SAMUEL ROBERT (Ch. E., 6)	Ore.	1816 18th St.
*KLOPPER, LEWIS WHITE (E. E., 36)	D. C.	6404 Georgia Ave.
KNAPP, ERNEST MALCOLM (Ch. E., 0)	D. C.	714 Rock Creek Church Rd.
*KORSCHEN, GEORGE JOHN (M. E., 0)	N. Y.	937 23d St.
KRAFFT, CARL F. (Ch. E., 118)	Wis.	1211 13th St.
KREHBIEL, ELMER HAROLD (Chem., 28)	D. C.	1016 9th St. N. E.
LADD, JOHN G. (M. E., 33)	N. Mex.	6109 Brookville Road, Chevy Chase, Md.
LANIGAN, ARTHUR LOYOLA (E. E., 43)	D. C.	122 Bryant St.
LAPISH, JOE HARRY (Arch., 46)	D. C.	57 Quincy Place N. E.
LE DUC, PERCY WALBOURNE (Chem., 87)	D. C.	817 Varnum St.
LELAND, LEONARD JESSE (C. E., 8)	D. C.	516 A St. N. E.
LEROY, JAMES ALFRED (Ch. E., 0)	D. C.	1230 Girard St. N. E.
*LEVITCH, ALEXANDER (Chem., 10)	N. Y.	2212 M St.
†LEWIS, ROBERT S. (C. E., 77)	D. C.	3316 Mt. Pleasant St.
†LIMPER, ERNEST A. (C. E., 0)	Ind.	Liberty Hut, Y. M. C. A.
LINDEN, BERNARD A. (Chem., 35)	N. Y.	2148 F St.
LINDSEY, IRVING (Chem., 24)	Va.	1009 Gibbon St., Alexandria, Va.
LIPPITT, EDWARD GARDNER (Arch. 30)	D. C.	3025 Newark St.
LITCHFIELD, CHARLES WILLIAM (M. E., 0)	D. C.	308 L St. S. E.

LLOMPART, JOSE A. (Ch. E., 45)	D. C.	4512 Georgia Ave.
LLOYD, DANIEL BOONE, JR. (C. E., 64)	Md.	Glendale, Md.
*LOEB, ABRAHAM (Ch. E., 0)	D. C.	22 3d St. S. E.
LOEFFLER, HYMAN (C. E., 0)	Va.	1120 King. St., Alexandria, Va.
LOEHLE, PAUL F. (E. E., 4)	D. C.	1412 Montague St.
LOOMIS, HELEN MAY (Arch., 0)	N. Y.	117 12th St. S. E.
LOOTZ, ALF CHRISTIAN, JR. (C. E., 22)	D. C.	1460 Newton St.
*LUNDBERG, ROBERT FERDINAND (Chem., 96)	D. C.	1101 Euclid St.
MCALISTER, RUSSELL NAYLOR (C. E., 3)	D. C.	Kensington Apts.
*MCCOLLUM, JOE N. (C. E., 0)	D. C.	1327 10th St.
MCCOY, JOHN SCOTT (Chem., 50)	D. C.	312 McLean Ave. S. W.
MCENTEE, ALBERT ARTHUR (C. E., 132)	Ill.	2124 P St.
MCNAMAMY, CARL DEWEY (M. E., 30)	D. C.	1333 15th St.
MACNAB, JOHN CARTER (M. E., 39)	Mass.	1427 Buchanan St.
MACKEY, STUART JONES (E. E., 92)	D. C.	1814 Park Road
MAHONEY, JOHN (Chem., 68)	Neb.	931 M St.
MALAMPHY, MARK CYRIL (E. E., 0)	Md.	624 H St.
MANBECK, DWIGHT L. (M. E., 0)	Iowa	Y. M. C. A.
MARKLEY, KLARE S. (Chem., 33)	Md.	Rockville, Md.
MARKS, FRANK HENRY (Ch. E., 55)	D. C.	1002 Fairmont St.
*MARKS, JOSEPH M. (C. E., 15)	D. C.	1425 E. Capitol St.
MARTIN, FRANK WHITCHER (M. E., 124)	D. C.	2106 First St.
*MATTFELDT, GUSTAV EARL (C. E., 0)	D. C.	2108 Flagler Place
*MATTINGLY, HAROLD WEBSTER (E. E., 4)	D. C.	1234 Good Hope Road S. E.
MEAKIN, ALLAN G., JR. (Ch. E., 14)	Ohio	617 22d St.
*MECUTCHEN, LAURA BARTLETT (Arch., 48)	Md.	Brentwood, Md.
MEEKS, FEARSON SAMUEL (C. E., 4)	D. C.	1419 Clifton St.
MEHRING, AMON LEWIS (Chem., 40)	Md.	Hyattsville, Md.

MEIMAN, WILLIAM GEORGE (C. E., 0)	D. C.	416 Warner St.
*MELTON, EDWARD ROANE, JR. (E. E., 0)	D. C.	1008 Md. Ave. N. E.
MICHAEL, SPENCER B. (E. E., 78)	D. C.	18 New York Ave. N. E.
*MILLER, FOREST JOHN (M. E., 6)	D. C.	1354 Shepherd St.
*MILLER, GEORGE DANIEL (E. E., 0)	Pa.	1311 Fairmont St.
MILLER, ODVER HARRISON (C. E., 119)	Okla.	1739 P St.
MILLER, RALPH F. (Ch. E., 57)	Pa.	338 Md. Ave. N. E.
MOELLER, OTTO (Chem., 0)	Va.	203 County Road, Cherrydale, Va.
MONTGOMERY, WILBUR BURSON (C. E., 30)	D. C.	126 Mass. Ave.
MOORE, GOGGIN EMERSON (Arch., 0)	Va.	1214 I St.
MOORE, JOHN HENDERSON (Chem. E., 40)	D. C.	1011 H St.
MOORE, L. L. ARDREY (Arch., 26)	N. C.	455 First St. S. E.
MORAWSKI, ARTHUR L. (Chem., 61)	Mass.	442 Mass. Ave.
MOULTON, GEORGE FRANKLIN (Chem. E., 62)	Ill.	1483 Newton St.
MUSE, FRANK A. (Arch., 4)	Va.	1833 M St.
MUSHAKE, WILLIAM IRA (M. E., 0)	D. C.	1919 Nichols Ave. S. E.
*MUZIKAR, GEORGE A. (Ch. E., 0)	Minn.	2131 F St.
MYERS, MYRON LEWIS (Chem., 0)	Md.	1420 Ames Place N. E.
NAGLE, RALPH S. (Chem., 20)	D. C.	1338 Shepherd St.
*NEILL, WILLIAM LYNVILLE, JR. (Chem. E., 6)	Texas	1930 Biltmore St.
*NELSON, ALMON SYLVESTER (C. E., 4)	D. C.	1019 10th St.
NEWCOMER, HARRY E. (Ch. E., 41)	D. C.	239 Q St.
*NIKIRK, PAUL ALVIN (M. E., 0)	D. C.	411 12th St. S. E.
NILSSON, KNUT IVAN (M. E., 4)	D. C.	102 Varnum St.
†O'DEA, MARIE ELIZABETH (Chem., 52)	Va.	825 13th St. N. E.
*OLCOTT, FLOYD BRONSON (M. E., 0)	Md.	2566 University Place
OPENSHAW, D. LYNN (C. E., 0)	Utah.	2023 G St.
ORLANDO, VINCENT JAMES (E. E., 52)	D. C.	234 1st St. S. E.

OWENS, BYRON (Chem., 23)	Pa.	401 McLachlen Bldg.
OWENS, JOHN ADAMS (M. E., 26)	Pa.	1415 New Jersey Ave.
*PALMER, JAMES C. (C. E., 0)	D. C.	2002 G St.
PARDOE, EDWARD SCHLEY (C. E., 30)	D. C.	1319 Park Road
PARKER, THORNTON JENKINS, JR. (M. E., 35)	D. C.	723 19th St.
PARSONS, DAVID ARMSTRONG (E. E., 0)	Md.	North Chevy Chase, Md.
*PATRICK, PERCY LEROY (E. E., 23)	D. C.	905 Webster St.
PETERSON, EMMET JAMES (C. E., 56)	Calif.	1246 House Office Bldg.
*PHILLIPS, I. JESSE, JR. (E. E., 0)	Ga.	410 6th St.
PIM, JAMES HARVEY (E. E., 0)	Colo.	3301 13th St.
PLUGGE, NORMAN A. (Chem., 0)	D. C.	1310 13th St.
POLK, IRL (C. E., 4)	Miss.	201 Eye St.
POWELL, ALFRED GOTTWALS (C. E., 15)	D. C.	628 6th St. N. E.
†POWELL, ARCHIE EISEN (M. E., 121) E. E. 1914, University of Wisconsin	Minn.	Bureau of Standards
*PRICE, BENJAMIN FRANKLIN (C. E., 0)	D. C.	2715 14th St.
PRINCE, ACEL EDWARD (E. E., 13)	Idaho	Box 20, House Office Bldg.
PROUDLEY, CHARLES EARL (Ch. E., 47)	D. C.	21 R St.
PYLES, RUSSELL (M. E., 0)	D. C.	615 Upshur St.
QUINN, EDWARD F. (M. E., 37)	N. Y.	1913 Pennsylvania Ave.
REEVES, ROBERT CHARLES (C. E., 0)	Kans.	1741 F St.
REH, EMMA (Chem., 130) A. B., 1917, George Wash- ington University	D. C.	1210 Delafield Place
*RICHARDSON, ELBERT LINDSEY (M. E., 0)	D. C.	910 O St.
RICKER, MARTIN MILLER (C. E., 5)	D. C.	3311 Q St.
RIDGELY, ARTHUR OERTLY (M. E., 0)	D. C.	203 Rhode Island Ave. N. E.
*RIDGEWAY, JOHN ALFRED, JR. (E. E., 4)	D. C.	218 Maple St., Takoma Park, D. C.
RILEY, ALBERT AUSTIN (Chem., 87)	Ohio	3116 19th St.

RINGLE, DAVID, JR. (E. E., 27)	Ore.	2032 Eye St.
RISSLER, RAYMOND LESTER (Chem., 0)	D. C.	1366 Spring Road
*ROCHE, JAMES JOSEPH (M. E., 0)	D. C.	722 F St. S. W.
†ROGERS, JOSEPH HARRIS (E. E., 0)	Md.	Hyattsville, Md.
ROLPH, J. NORTON (C. E., 0)	Ill.	Kenesaw Apt., 16th and Irving Sts.
ROMHILT, HELEN JUNE (Chem., 72)	Ind.	2011 Franklin St. N. E.
ROMMEL, GEORGE F. (M. E., 24)	D. C.	21 Myrtle St. N. E.
ROSE, LEONARD JULIAN (M. E., 76)	D. C.	730 Shepherd St.
ROSENBERG, SAMUEL (M. E., 29)	D. C.	721 4½ St. S. W.
ROSS, FRANCES PRITCHARD (Ch. E., 0)	D. C.	2911 Mills Ave. N. E.
ROTZLER, WILLIAM M. (M. E., 0)	Utah	243 Florida Ave.
†ROWE, CHARLES ROY (E. E., 0)	D. C.	646 Lexington Place N. E.
*RUDY, JOHN TAYLOR, JR. (M. E., 0)	Minn.	1519 Caroline St.
RYAN, ALFRED EDWIN (Ch. E., 16)	D. C.	1368 Spring Road
ST. CLAIR, GUILFORD PAYSON (C. E., 59) A. B. 1918, Dartmouth College	Me.	603½ 4th St.
ST-OMER-ROY, JAMES AUGUSTUS (M. E., 0)	N. J.	3411 R St.
*SAEGART, ERNEST REDFIELD (Chem., 30)	Conn.	441 12th St. N. E.
SALTZMAN, GEORGE CLIFFORD (C. E., 4)	D. C.	1303 Newton St., Brookland
*SALZMAN, WILLIAM AUGUST (M. E., 0)	N. Y.	239 8th St. S. E.
SANBORN, NORRIS HENRY (Ch. E., 42)	Hawaii	115 Maryland Ave. N. E.
*SANDERS, JAMES HENDERSON (M. E., 4)	D. C.	57 Randolph Place
*SANFORD, EMMONS MONTGOMERY (E. E., 0)	Va.	1521 Rosedale St. N. E.
*SARGENT, RAY FRED (E. E., 67)	Vt.	1838 Calvert St.
SCHEMET, HERBERT K. (Ch. E., 0) L.L.B., M.P.L., Georgetown University	Ind.	1134 Florida Ave. N. E.
SCHMITT, EDWIN ALEXIS (C. E., 99)	D. C.	305 Southern Building
SCHMITT, HENRY MARTIN (M. E., 29)	N. Y.	1429 U St.

SCOTT, HUNTER DUNLAP (Arch., 27)	D. C.	1641 R St.
SCOTT, WALTER CLIFFORD, Jr. (M. E., 69)	D. C.	649 B St. N. E.
SELVEY, WILLIAM H. (Ch. E., 0)	W. Va.	2106 G St.
SHOEMAKER, FRED EUGENE (E. E., 94)	D. C.	5310 Belt Road
SHREVE, RICHARD SOUTHERNE, Jr. (M. E., 20)	Va.	Navy Dept., Bu. C. & R.
*SHULTERS, EARL STANLEY (E. E., 27)	D. C.	641 A St. S. E.
*SILL, NORMAN EARLE (M. E., 0)	D. C.	132 Adam St.
SILLERS, FREDERICK, Jr. (Ch. E., 0)	D. C.	1349 Otis Place
SLOAN, MARGUERITE PEYTON (Chem., 0)	Md.	310 Indiana Ave.
SLOAN, NATHANIEL CRAWFORD (M. E., 0)	D. C.	2314 17th St.
SMITH, CLARENCE ADRIAN, Jr. (Arch., 14)	Md.	36 Todd Place N. E.
*SMITH, EDGAR DONALD (C. E., 41)	D. C.	1246 Irving St.
SMITH, MELBOURNE J. (M. E., 0)	Va.	2030 G St.
†SMITH, THOMAS WALSH (M. E. 120)	D. C.	917 6th St. N. E.
B. S. in E. E. 1909, Iowa State University		
SMITH, WILEY C. (Ch. 53)	Miss.	151 11th St. S. E.
- A. B., 1916, Mississippi College		
SNOW, HAROLD ARTHUR (E. E., 68)	D. C.	656 Newton St.
SOARS, FRANCES LEOTA (Arch., 10)	Pa.	1927 Park Road
SONNTAG, HARCOURT (M. E., 0)	Va.	McLean, Va.
SPASOFF, JOHN (E. E., 130)	Calif.	Patent Office
SPEAR, ALBERT A. (Chem., 73)	D. C.	4 Sixth St. N. E.
SPECK, VERA P. (Arch., 0)	D. C.	1343 Clifton St.
SPERRY, ALBERT (Ch. E., 22)	Fla.	617 Maryland Ave. N. E.
SPIELMAN, WILLIAM PAUL (Ch. E., 0)	Va.	609 Prince St., Alexandria, Va.
*SPRINGMAN, DAVID L. (M. E., 0)	D. C.	3816 7th St.
SPURR, FRANK ARTHUR (Chem., 97)	Iowa	1404 21st St.
STARR, ARTHUR PRICE (Arch. 51)	N. Y.	120 Randolph Place

STEWART, THOMAS FRANKLIN (C. E., 60)	D. C.	703 9th St. N. E.
*STICKEL, JOHN FREDERICK (Ch. E., 20)	D. C.	67 Randolph Place
STOCKARD, JOHN MAHON (M. E., 0)	D. C.	1429 U St.
STOUT, MORRIS VANZANDT (C. E., 0)	D. C.	1444 W St.
STRANG, HARRY LEDDEN, JR. (E. E., 101)	D. C.	2020 1st St.
*STRAUCH, DEWEY ANTHONY (M. E., 0)	Texas	1432 V St.
*STRAWN, FLOYD L. (M. E., 23)	D. C.	1408 Girard St.
†STROTHER, DAVID HUNTER (M. E., 0)	W. Va.	3153 Mt. Pleasant St.
*SULLIVAN, GEORGE WILLIAM (M. E., 7)	R. I.	600 Park Road
*SWEENEY, JAMES JOSEPH (C. E., 40)	D. C.	47 K St. N. E.
TAYLOR, JOHN CORBIN, JR. (C. E., 0)	D. C.	531 Quincy St.
TEMIN, MORRIS (M. E., 24)	D. C.	515 4½ St. S. W.
THOMASSON, WILLIAM THOMAS (C. E., 0)	D. C.	640 E St. N. E.
THORNE, MAURICE ANSON (M. E., 0)	Md.	Beechwood, Tunlaw Road
TIBBITTS, GORDON CHASE (Ch. E., 70)	D. C.	321 Essex Ave., Chevy Chase, D. C.
*TILTON, DANIEL HENRY (Chem., 0)	D. C.	1823 Kalorama Road
TODD, LESTER J. (Ch. E., 0)	Ohio	2133 F St.
TONKIN, WILLIAM HENRY (Chem., 66)	D. C.	2121 15th St.
TRUMBLE, MILTON MASON (M. E., 0)	D. C.	407 S. C. Ave. S. E.
TUCKER, OSCAR SAMUEL (E. E., 42)	Pa.	Y. M. C. A.
TUROFF, LOUIS WEBSTER (C. E., 92)	D. C.	1804 2d St.
TUROFF, RALPH S. (M. E., 27)	D. C.	1804 2d St.
*TYLER, CARL WALTER (C. E., 0)	D. C.	1428 A St. N. E.
ULLRICH, WARREN (Arch., 0)	Mass.	1010 11th St.
VARNEY, FORREST FRANKLIN (C. E., 79)	Wis.	Cherrydale, Va.
*VITALE, ANTHONY FRANCIS (E. E., 0)	D. C.	1769 Willard St.
*VOGEL, CLARA LOUISE (E. E., 0)	Ky.	529 Tenn. Ave. N. E.
WAILES, RAYMOND BARTLETT (Ch. E., 15)	D. C.	3118 14th St.

WALLACE, RICARDO F. (C. E., 4)	Md.	302 District Bldg.
WANGE, HANS (M. E., 0)	D. C.	521 4th St.
WARD, HERMAN SMITH (C. E., 118)	D. C.	1317 11th St.
WARD, WILLIAM ROBINSON, JR. (M. E., 26)	D. C.	1346 Monroe St.
WARREN, ROBERT HARVEY (M. E., 0)	D. C.	3549 11th St.
WEARTH, LAURA M. (Arch., 0)	Iowa	1011 New Hampshire Ave.
WEBB, WILLIAM T. (C. E., 34)	D. C.	2700 36th St.
WEESE, DONALD OURAY (Arch., 22)	Ind.	1722 Euclid St.
WEINSTEIN, MEYER (Chem., 98)	D. C.	3338 M St.
WENDT, ROBERT H. (E. E., 21)	Iowa	Home Apts., 7th and K Sts.
WETHERILL, FREDERICK VEAZEY (M. E., 119)	Ore.	1832 Biltmore St.
WHYTE, CLIFTON ANDREWS (C. E., 0)	D. C.	1125 Allison St.
WHYTE, RUSSELL IRVING (Ch. E., 40)	D. C.	2503 14th St.
WILDER, WILLIAM FRANKLIN (C. E., 98)	N. J.	1523 22d St.
WILKS, VAN B. (E. E., 0)	Mo.	1907 H St.
WILSON, A. HERRMANN (E. E., 31)	D. C.	911 Maryland Ave. N. E.
WINDRIDGE, FREDERICK NUSON (M. E., 17)	Va.	Cherrydale, Va.
†WOLF, HARRY (M. E., 0)	D. C.	8 5 6th St.
†WOODWARD, CLARENCE MAXWELL (Arch., 0)	D. C.	1234 Harvard St.
WOOLF, DONALD O. (C. E., 26)	D. C.	62 S St.
WORRALL, ROBERT HENRY (E. E., 0)	D. C.	722 N. Car. Ave. S. E.
*WRIGHT, LEIGH WASHBURN (C. E., 0)	Mass.	1330 R St.
YINGLING, CLINTON KEMP, JR. (C. E., 15)	D. C.	1105 17th St.
†YOUNG, ELIZABETH B. (Arch., 0)	D. C.	3422 13th St.
†ZIMMERMAN, ARTHUR G. (C. E., 0)	Ind.	211 Fourth St. S. E.

SPECIAL STUDENTS

†ADAMS, EDWARD GODMAN	Md.	3 Leland St., Chevy Chase, Md.
ANDERSON, HARRIET	D. C.	1343 Clifton St., Apt. 46
†ANDERSON, WILLIAM JONES, JR.	D. C.	1320 Harvard St.

*BAUR, JOSEPH ULRICH	Mich.	1029 22d St.
†BELIN, LOUIS IRVING	D. C.	923 M St.
BENNETT, HARRY	Pa.	4109 8th St.
BOBBITT, WILLIAM GILMORE	Ky.	25 Quincy Place.
BONTZ, LESLIE NORWOOD	D. C.	1005 9th St.
*†BOONE, ROBERT E.	D. C.	1373 Irving St.
*BOYLE, MARGARET VIRGINIA	Mass.	1259 New Hampshire Ave.
BRADLEY, HORACE YALE	Ga.	Y. M. C. A.
BRIGGS, GUY HAMIL	Md.	Gaithersburg, Md.
BRIGHAM, CECIL E.	Mass.	1805 G St.
BRIGHAM, CYRIL ARTHUR	Mass.	1805 G St.
†BROWNE, THOMAS S.	D. C.	181 Uhland Terrace N. E.
BUTLER, CLARENCE WELLS	Mo.	154 Adams St.
*CARLSON, WENDELL L.	N. Y.	805 B St. S. E.
*CARROLL, MRS. ANNA A.	Pa.	1216 Eye St.
CHAGNON, LEON E. ASHLEY	Mass.	755 Quebec Place
†CONNER, JESSE PAUL	Ind.	112 E. Capitol St.
†CONYERS, CHRISTOPHER T.	Ga.	1100 Vermont Ave.
*COOK, ALHAMBRA	Ind.	307, The Plaza
†CORNELL, EDWARD MAYBURY	Ill.	2727 30th St. N. E.
*CORRIGAN, CHARLES THOMAS	Md.	3728 Oliver St.
CORSON, HOMER JEAN	D. C.	1316 12th St.
COUPER, WILLIAM	D. C.	3605 Brothers Place.
CRESWELL, GEORGE WILLIAM	Md.	1100 Vermont Ave.
*CULBERTSON, RUTH	N. C.	T-U Bldg., Govt. Hotels
CUTHBERTSON, HARRY B.	D. C.	2204 Evarts St. N. E.
†CUTLER, WILLIAM VICKERY	Ind.	2806 13th St. N. E.
†DARCY, GEORGE DEWEY	Md.	2023 Park Road
DENT, JAMES A.	D. C.	3009 P St.
DEUEL, HARRY JAMES	Minn.	2035 Park Road
*DIXON, HENRY MARSHALL, JR.	D. C.	2013 Eye St.
DOWNHAM, GEORGE FRANCIS	Va.	304 So. St. Asaph St., Alexandria, Va.
DUFFY, JOHN PAUL	D. C.	2511 17th St.
†EITZEL, WALTER BYRON	Pa.	1736 G St.
†ELLIOTT, FLORIAN A.	Va.	1003 Woodward Bldg.
ELLIS, JOHN FRANK	D. C.	1333 Vermont Ave.
ERBE, ERNST A. (Lieut. U. S. A.)		3218 13th St.
*FITTON, ROBERT DOUGLAS	D. C.	1315 Half St. S. W.
FLAHERTY, LEO MICHAEL	D. C.	7 Sixth St. N. E.
†FORD, CHRISTOPHER WM.	N. Y.	702 19th St.
†FOX, JAMES C.	Me.	Metropolitan Club
LL.B. 1892, LL.M. 1894, Georgetown		
GALLAGHER, THOMAS A.	N. Y.	2004 15th St.
†GEBHARD, LOUIS AUGUST	N. Y.	1820 Calvert St.
†GILMARTIN, AUSTIN FOLGER	N. J.	Wardman Courts, South
GILMORE, BERNHARD HAROLD	W. Va.	415 G St.
A.B., 1919, University of West Virginia		
GRAHAM, HARRY	Tenn.	453 Lamont St.
GRANT, CHARLES C.	D. C.	1119 O St.
B.S. 1911, Allegheny College		
*GRAY, ROY CLIFTON	Tenn.	808 G St. S. E.
GREEN, JULIA E.	Mo.	4728 13th St.
†GROSER, ANNA I.	Pa.	1814 G St., Apt. 1
GUILFORD, HORACE ELMER	Va.	McLean, Va.

HAIRE, HOMER H.	Mich.	715 Shepherd St.
HANN, RAYMOND M.	D. C.	1018 Mass. Ave. N. E.
†HARTER, SGT. FRED R.	Mich.	2606 Mozart Place N. W.
*HATFIELD, HAROLD DE WOLFE	Canada	1361 Irving St.
B. S., 1910, Connecticut State College; B. S. in M. E., 1915, George Washington University		
*HAWKINS, JOSEPHINE	Wyo.	1209 12th St.
HENNESSEY, JOHN PATRICK	Conn.	1165 19th St.
HOBSON, MELVIN CLAY	D. C.	19 W St. N. W.
HOFFMAN, JAMES I.	Pa.	415 Shepherd St. N. W.
A.B. 1918 Franklin and Marshall College		
HOOPER, ALBERT G.	Me.	1410 M St.
HOUGHTON, JOSEPH DAVENPORT	Mass.	917 18th St., Apt. 4
HOOVER, WALLACE BEATTIE	D. C.	1514 17th St.
HOWARD, FORREST KESHENA	Va.	Falls Church, Va.
†HOWARTH, LOUISE	Miss.	1814 G St., Apt. 1
B.S. 1916 Bellhaven College		
*HURLEY, HERBERT E.	D. C.	615 Upshur St.
*JONES, THOMAS HENRY	N. Y.	1404 Belmont St.
*KEYSER, CLARENCE NAAMAN	Pa.	109 Chestnut St., Takoma Park
B.S., 1914, Pennsylvania State College; M. S., 1917, Univ. of Georgia		
*KIENER, TYLER BAINBRIDGE	D. C.	919 P St.
*KILMARTIN, JEROME O.	Va.	1834 Ingleside Terrace
KING, ANGUS STANLEY	Va.	2024 King St., Alexandria, Va.
KIRKPATRICK, ARNOLD	Fla.	29 Eye St. N. E.
B.S., 1915, Hamline University		
*KNAUB, RICHARD Z.	D. C.	225 12th St. N. E.
†KNIGHT, KARL	D. C.	223 Seaton Place N. E.
*KSAIDA, CHARLES J.	D. C.	1717 De Sales St.
LANKFORD, JESSE W.	D. C.	2450 Rhode Island Ave. N. E.
LAWRENCE, WALTER BARTOW	Texas	707 Mt. Vernon Place
LEEF, WILLIAM HUNTER	Va.	1300 Pennsylvania Ave.
LEHMAN, PERCY BIRKETT	Md.	Rockville, Md.
LINDSEY, PAUL	Va.	1009 Gibbon St., Alexandria, Va.
MACDONNELL, LOUISE	Mass.	2938 Upton St.
MACEWEN, HAROLD EDWARD	N. Y.	Y. M. C. A.
*MC CARTHY, ELWOOD MILTON	Va.	2002 G St.
MC CARTHY, WALTER T.	Va.	Cherrydale, Va.
*MCCOOK, HAROLD	N. Y.	4915 13th St.
MCCORMICK, JOHN D.	D. C.	1377 North Carolina Ave.
B. S in C. E., 1914; C. E., 1915, George Washington Univ.		
*MANN, PERCY W.	Conn.	602 Quincy St.
*†MEARES, HENRY HOLMES	D. C.	3532 Park Place
MEHLFELT, JAMES R.	Pa.	21 Sixth St. N. E.
*MEMBERT, CHARLES	D. C.	405 A St. S. E.
KNICKERBOCKER	N. H.	2949 Tilden St.
*MEYERSON, MILTON DEAN	W. Va.	Laboratory, Walter Reed Hospital
MILBEE, GROVER C.		
Ph.C., 1915, Valparaiso Univ.		

*MINASIAN, GEORGE TALMAGE	N. Y.	1802 R St.
M.E., 1918, Cornell		
MITCHELL, HOWARD J.	Pa.	House of Representatives
*†MONROE, THOMAS MELTON	D. C.	2018 1st St.
MUDD, KOSTKA	D. C.	Walter Reed Hospital
MURRAY, EDMUND CHURCHILL	Md.	1825 Adams Mill Road
*NADELMAN, ELIAS	Conn.	1414 12th St.
*NARAMORE, GEORGE LEONARD	D. C.	4518 9th St.
OHRLICH, AXEL VALDEMAR	D. C.	511 Seward Square S. E.
*OHSOL, JOHANN G.	D. C.	2236 Decatur Place
Ph.D., Harvard University		
PAGTER, AMOS TOWNSEND	Conn.	3120 Mt. Pleasant St.
Ph.B., 1911, Yale		
*†PATRICK, ERMIN CHAMBERS	D. C.	600 23d St.
*PATRICK, WILLIAM EARLE, JR.	R. I.	1823 G St.
*PATTON, JOHN WILLIAM	N. C.	3412 P St.
A.B., 1918, University of North Carolina		
*PEARSON, EDGAR W.	Me.	Apt. 405, The Marne
*PETERMAN, JAMES CUYLER	La.	1119 Euclid St.
PHALEN, WILLIAM CLIFTON	D. C.	1717 Lanier Place
B.S., 1899, M.S., 1902 Massachusetts Inst. of Technology		
Ph.D., 1909, George Washington University		
*PHILIPS, WALTER HIRAM	Ohio	1842 Calvert St.
PIERPONT, HARRY Y.	D. C.	1338 Kenyon St.
POYNTON, EDWARD ARTHUR	D. C.	4019 5th St.
†PURYEAR, ALFRED I.	Tenn.	Office Director of Air Service
*RAMSAY, HAROLD THEODORE	Mass.	1954 Biltmore St.
*RILEY, HARRY CONRAD	D. C.	2624 Garfield St.
RODIER, PHIL L.	D. C.	1831 F St.
ROLLWAGE, EDGAR A.	Ohio	Y. M. C. A.
RUSSLER, ELMORE D.	D. C.	12 Fourth St. S. E.
*ST. SAUVEUR, LEWIS A.	Mass.	608 M St.
*SCHNABEL, WM. J.	D. C.	207 F St. N. E.
*SEELEY, HAROLD J.	N. Y.	Apt 1, 2031 F St.
SEMMES, HARRY HODGES	Md.	Room 608 Ouray Bldg.
B.S., 1913, Dartmouth		
LL.B., 1916, George Washington University		
*SETH, ALEXANDER LAZEAR	Md.	1116 10th St.
A.B., 1898, Johns Hopkins		
LL.B., 1900, University of Maryland		
SIEBEL, WILLIAM LAWRENCE	D. C.	Copley Courts
*SILBER, WALTER CHARLES	Pa.	239 9th St. N. E.
*SIMPSON, PAUL J.	D. C.	3931 14th St.
†SLATTERY, THOMAS F.	Conn.	153 Rhode Island Ave.
†SMITH, GEORGE A.	Wash.	2700 13th St.
SMITH, RAYMOND C.	D. C.	1006 B St. S. W.
*SMITH, SAMUEL L.	Va.	Glencarlyn, Va.
*SPRING, ARLINGTON C.	N. Y.	1241 E St. N. E.
SPRINGER, GEORGE PERRY	Mich.	2312 Woodridge St. N. E.
B.S. in C. E., 1911, Michigan Agricultural College		
†STEVENS, ALLEN REYNOLDS	D. C.	35 Carroll Ave.

†SUTTON, DICK	Okla.	1329 Delafield Place
SWEITZER, FRED W.	Va.	822 Connecticut Ave.
*TICER, WILMER L.	D. C.	1025 Florida Ave. N. E.
*TINKER, ROYAL MUSGRAVE	D. C.	1440 Rhode Island Ave.
†TONKIN, MAURICE BRADLEY	D. C.	2121 15th St.
*TURNER, EDWARD	Wash.	314 Rutland Courts
*†UPTON, WILLIAM BAYLY, JR.	D. C.	1842 Calvert St.
VALENTINE, CLYTUS E.	Ohio	1615 S St.
VAN BRUNT, FRED B.	Mich.	1316 Monroe St.
*VIETH, KENNETH	D. C.	2555 Rhode Island Ave. N. E.
†WADSWORTH, ROBERT LANGFORD	D. C.	70 V St.
WAGONSELLER, EARL A.	Ill.	526 Irving St.
WALTERS, MARION IRVEN	D. C.	3226 Warder St.
†WATSON, JOHN ALFRED	Md.	4011 14th St.
*WEBSTER, WM. STUART	D. C.	1448 Park Road
*†WEISGERBER, CHARLES FREDERICK	Pa.	1505 22d St.
WHALAND, NORMAN D.	Mass.	3746 McKinley St.
WHITE, ERNEST CROEL	Va.	1829 19th St.
A.B., 1910, Randolph-Macon		
*WILKINS, THOMAS MARTINEZ	Wyo.	1428 R St.
*WILKINSON, HARRY PAYSON	Md.	2 Magnolia Parkway, Chevy Chase. Md.
†WILSON, JOHN NANTS, JR.	Md.	Landover, Md.
†YUROW, DAVID	D. C.	637 Princeton St.
ZEPP, EDWARD FRANKLIN	D. C.	3920 Illinois Ave.
ZIMMERMAN, CHARLES BURRITT	Pa.	1028 17th St.

TEACHERS COLLEGE

CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS
AND BACHELOR'S DIPLOMA IN EDUCATION

AARONSON, NAOMI (54) (D. C.)	1106 Fairmont St. N. W.
*ADAMS, MARJORIE (0) Tenn.)	1209 K St. N. W.
ADKINS, MRS. JESSE (48) (Wis.)	Quincy St., Chevy Chase, Md.
†ALLEN, FLORENCE (0) (Mass.)	506 Seward Square S. E.
AMBROSE, AMY (0) (Iowa)	Government Hotels.
*ANDERSON, THEODORA CUYLER (0) (Va.)	230 C St. N. W.
ANDREWS, ELIZABETH MARIE (48) (D. C.)	1837 14th St. N. W.
†APRIL, SYBIL REBECCA (0) (N. J.)	963 14th St. S. E.
ATWELL, BESSIE (44), (Ill.)	318 9th St. N. E.
BAILEY, LILLIE PORTER (116), (D. C.)	1513 8th St. N. W.
BARKER, ALMA (84), (D. C.)	302 S St. N. E.
BARTSCH, MRS. SIGNE GJERDRUM (102), (D. C.)	1456 Belmont St. N. W.
†BASHFORD, MARGARET JOSEPHA (104), (Va.)	R. F. D. 2, Alexandria, Va.
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*BEACH, RUTH CATHERINE (0), (Ohio)	Fort Recovery, O.
BECK, MARGARET MAE (30), (Wis.)	801 B St. S. E.
BELL, MARGARET BYRD (71), (Tex.)	1322 Rhode Island Ave. N. W.
BELL, MRS. ETTA R. (69), (Mo.)	2129 Channing St. N. E.
BELL, RUTH (66), (D. C.)	642 C St. N. E.
BERGER, EDWIN ANSON (90), (Pa.)	1135 17th St. N. W.
†BERRY, MARY PARRAN (0), (Mich.)	609 6th St. N. W.

- †BETHEL, IVA (0), (Wis.).....907 13th St. N. W.
 BETHEL, NORA LUCINDA (0), (Ill.).....3212 Park Place.
 *BIRDSONG, BIRDIE OTIS (59), (Ga.).....Government Hotels, E-F Bldg.
 BLEDSOE, DORA BELE (0), (Ky.).....201 Eye St. N. W.
 †BLOCH, MRS. SARA KOENIGSBERG (0), (D.
 C.).....1320 Belmont St. N. W.
 *BOLEN, VIRGINIA FRANKLIN (0), (Va.)...1412 Eye St. N. W.
 *BORDEN, HAZEL A. (0), (Mass.).....1501 Farragut St. N. W.
 *BOWDEN, ANNA VIRGINIA (0), (D. C.)...Silver Spring, Md.
 †BOWERS, ETHEL (70½), (Ind.).....1736 F St. N. W.
 BOYD, HELEN (24), (N. J.).....1601 6th St. N. W.
 BRAY, MARY MADELINE (56), (Pa.).....1325 D St. N. E.
 *BRINK, ELIZABETH C. (0), (Pa.).....402 Shepherd St. N. W.
 *BRISTOW, MARIE (26), (Ind.).....1409 Chapin St. N. W.
 †BROOM, EDWIN WARFIELD (93), (Md.)...Rockville, Md.
 †*BROWN, ELIZABETH ESTELLE (0), (S. D.)...2946 Mills Ave. N. E.
 BROWN, GEORGIA MAE (76), (Minn.)....Government Hotels, R-S Bldg.
 BRUCE, GAIL (88), (Ohio).....1652 29th St. N. W.
 BRUMM, HENRYETTE (82), (D. C.).....517 E St. N. E.
 BRYAN, BESS LUCILE (0), (Tenn.).....1126 New Hampshire Ave. N.
 W.
 BURROUGHS, EUGENE SCOTT (95), (Md.)...Clinton, Md.
 †CAMPBELL, BESSIE BLACKWELL (30),
 (Va.).....1305 Rhode Island Ave. N. W.
 CARLSON, ELIN (48), (Mich.).....664 Highland Ave. Takoma Pk.
 †CARNEY, ETHEL (0), (D. C.).....1009 Otis Place.
 †CARTER, NELLE ELIZABETH (0), (Ind.)...1827 Eye St. N. W.
 CHALLICE, CLARA ELIZABETH (58), (D. C.)...1789 Lanier Place.
 CHAMBLIN, JULIA VIRGINIA (0), (Va.)....Apt. 104, Falkstone Courts.
 CHAPMAN, MARION LOUISA (0), (D. C.)...3228 13th St. N. W.
 *CHEATHAM, TERESA W. (0), (N. J.)....1804 16th St. N. W.
 *CHEESEMAM, EMMA C. (52), (N. Y.)....3512 10th St. N. E.
 *CLIFFORD, MAY FRANCES (0), (Minn.)...656 Mass. Ave. N. E.
 COATES, Lyla M. (0), (D. C.).....4601 Ga. Ave.
 *COBB, EDITH GREY (0), (N. C.).....Government Hotels, X-Y Bld.
 COLBERT, ALICE (0), (D. C.).....1782 Lanier Place.
 COMPTON, LAKE FORD (0), (Va.).....912 14th St. N. W.
 *CONNELL, LILLIE MARIE (115), (D. C.)...1642 29th St. N. W.
 *COTTER, MARY LOUISE (48), (D. C.)....1648 Fuller St. N. W.
 COVINGTON, LOUISE ISABEL (113), (Mo.)...208 Md. Ave. N. E.
 CRABTREE, EUNICE KATHERINE (30), (D.
 C.).....1304 Euclid St. N. W.
 CROCKETT, BESSIE LEE (71), (D. C.)....1617 Swan St. N. W.
 *CROWDER, NAOMI (10), (Va.).....1155 Morse St. N. E.
 DARBY, MARGARET IJANIS (24), (Md.)...1819 G St. N. W.
 DAVIS, EMILY R. (0), (D. C.).....107 R St. N. W.
 DAVISON, MRS. MABEL M. (43), (D. C.)...2700 13th St. N. W.
 †DAVISON, RUTH LOWE (8), (D. C.)....Government Hotels, P-Q Bldg.
 *DE SHIELDS, MAE VIOLA (0), (D. C.)...125 5th St. N. E.
 DUFOUR, ARLINE HUGHES (113), (D. C.)...1860 Columbia Road.
 DULAC, MRS. HILDA NORTH (95), (D. C.)...Univ. Apts., Baltimore, Md.
 DULIN, CECILIA PINKNEY, (69), (D. C.)...3725 Morrison St. N. W.
 *DUNLAY, ANN VERONICA (0), (Neb.)....3343 Mt. Pleasant St.
 *DUSKIN, EDNA (0), (Kan.).....406 E. Wardman Courts.
 †EARNEST, HAZEL VIRGINIA (0), (Md.)...Mt. Rainier, Md.
 †EARNEST, LILLIAN OPHELIA (0), (Md.)...Mt. Rainer, Md.
 ECKBERG, LILLIAN S. (0), (Minn.).....618 11th St. N. W.

- EDIC, MARGARET JANE (78), (N. Y.)..... 3812 7th St. N. W.
 EDINBURG, MRS. FLORENCE P. (68),
 (Mich.)..... 714 5th St.
 ELLIOT, JANET ELIZABETH (0), (D. C.)... 3757 McKinley St.
 EPSTEIN, TESSIE (0), (N. Y.)..... 1432 R St. N. W.
 EWER, MAIDEE (52), (Calif.)..... 1141 New Hampshire Ave. N.
 W.
 FARIS, HELLEN MILLS (0), (D. C.)..... 1346 Harvard St. N. W.
 FEAGANS, HAZEL (0), (Ind.)..... 1318 Q St. N. W.
 †FISHER, JULIA BELLE (0), (Ala.)..... 216 12th St. S. E.
 FOLEY, CAROLINE M. (60), (Pa.)..... 1411 11th St. N. W.
 FOSS, BETH ISABEL (48), (N. Y.)..... 2540 14th St. N. W.
 FOWLER, ALICE VIRGINIA (12), (D. C.)... 1346 Irving St. N. W.
 †FOX, LAURA BLANCHE (0), (Miss.)..... 2300 18th St. N. W.
 FRAVEL, MARGARET (3), (Va.)..... East Falls Church, Va.
 FRAZIER, SUSIE JOLLEY (54), (Md.)..... 1842 Ingleside Terrace.
 FREDLEY, DAISY O. (54), (Ohio)..... 1827 Eye St. N. W.
 FREEMAN, HARRIET HELENA (28), (Ill.)... 3312 Park Place.
 GADDIS, MARGARET TRIMBLE (98), (D. C.) 1017 E. Capitol St.
 GALIHER, BLANCHE P. (62), (D. C.)..... 436 6th St. N. E.
 GAMBS, JOHN SACKE (68), (Ohio)..... 2617 University Place.
 GARDNER, ELLA (88), (D. C.)..... 3367 18th St. N. W.
 GARDNER, RUFUS SOLOMON (64), (Va.)... 720 19th St. N. W.
 *GARST, JULIA C. (0), (Kan.)..... 1226 12th St. N. W.
 GERRY, KATHERINE (0), (D. C.)..... 3029 13th St. N. W.
 GESSFORD, MARGARET (58), (D. C.)..... 3123 13th St. N. W.
 GETTY, ANNIE GRAHAM (67), (D. C.)... 1647 Hobart St.
 *GILES, MARY LOUISE (0), (Pa.)..... 3221 Mt. Pleasant St.
 GILLETTE, LAURA (10), (N. Y.)..... 206 6th St. S. E.
 *GOLDMAN, DOROTHY (0), (Texas)..... 1520 P St. N. W.
 *GREEN, LEONARD HARRISON (48), (Pa.)... 706 15th St. S. E.
 GREGG, EDITH W. (48), (D. C.)..... 1326 Columbia Road.
 GREGORY, AGNES JOSEPHINE (70), (D. C.) The Olympia.
 *GREGORY, ETHEL (0), (Mich.)..... 3747 Huntington St.
 *GRIFFIN, ESTELLA M. (48), (Neb.)..... 2622 13th St. N. W.
 GUEST, CORA ESTELLE (16), (D. C.)..... 3165 18th St. N. W.
 GUEST, MARGARET REID, (16), (D. C.)... 3165 18th St. N. W.
 GUILFORD, CHARLES CARLTON (83), (Va.).. R. F. D. 1, McLean, Va.
 GUYTON, AGNES H. (0), (Colo.)..... The Iroquois Apartment.
 *HALEY, NELLIE ELIZABETH (52), (Okla.).. Government Hotels, E-F Bldg.
 *HALL, MARIE LAURETTA (0), (W. Va.)... 1927 G St. N. W.
 HANDY, JESSIE BRUCE (48), (D. C.)..... 1937 Park Road.
 *HANSEN, FLORENCE E. (0), (Pa.)..... 1229 Conn. Ave.
 *HANNAN, LORETTA (0), (D. C.)..... 51 Rhode Island Ave. N. W.
 HARDELL, LELIA B. (94), (D. C.)..... 906 P St.
 HARTWELL, MRS. DESSA MOORIS (48),
 (Ill.)..... 1819 G St.
 HASLUP, DOROTHY LUCILE (0), (Md.).... Laurel, Md.
 *HAYES, ANNIE BROWN (42), (Pa.)..... 1421 Columbia Road.
 †HEIDER, ANNA (68), (D. C.)..... 943 Westminster St.
 HENDERSON, ELEANORA (84), (D. C.).... 1630 17th St.
 †HERMAN, ELIZA JANE (0), (Mich.)..... 1315 20th St.
 HESSLER, AGNES BERTHA (40), (D. C.)... 1358 C St. S. W.
 *HILL, ALMA CELESTE (0), (D. C.)..... 1367 Quincy St.
 *HILL, HELEN BLACKSTONE (52), (D. C.).. The Alabama.
 *HILLYARD, RUTH MILDRED (0), (D. C.)... 1124 10th St.
 *HILTON, EMMA L. (0), (Mich.)..... 2622 13th St.

- HINES, RUTH GLADYS (0), (Mass.).....1201 E. Capitol St.
- HIPPE, INGA AUGUSTA (9), (Minn.).....1419 Clifton St.
- *HOLMES, IMOGENE ELIZABETH (0), (Ind.).....1627 Lamont St.
- HOPF, EVELYN ERNESTINE (0), (Mass.)....158 You St. N. E.
- HOPKINS, VERA (0), (Iowa).....421 6th St. N. E.
- HUBER, JOSEPHINE MARIE (58), (D. C.)...1308 Md. Ave. N. E.
- HUCKABEE, HENRY GRADY (62), (Ala.)....Civil Service Comm.
- HUMPHREY, MARY ELIZABETH (95), (D. C.)..406 Rhode Island Ave. N. W.
- *HYNES, EDNAH MAY (0), (Md.).....315 E. North Ave. Baltimore, Md.
- JACKSON, FRANKLIN JOSEPH (56), (D. C.)..1212 Massachusetts Ave. N. W.
- *JACKSON, MURIEL AGNES (0), (N. Y.)....1515 Massachusetts Ave. N. W.
- JENKINS, KATHRYN BIRD (0), (D. C.).....903 H St. N. W.
- JOHNSON, EMILY WINIFRED (67), (Va.)....Cherrydale, Va.
- JOHNSON, VIRGINIA HEAD (86), (D. C.)....1107 O St. N. W.
- JONES, FLORENCE M. (0), (Neb.).....2123 18th St. N. W.
- JONES, MRS. MARIE MACMILLAN (Wash.)..2315 Pennsylvania Ave. N. W.
- JONES, MIRIAM MARGARET (15), (N. C.)...107 Second St. N. E.
- JUDGE, IVA MARGARET (0), (Wis.).....11 Randolph St.
- *KAIL, HARRIET RANDALL (65), (D. C.)...917 Florida Ave.
- KACFFMAN, HARVEY EARL (117), (Pa.)....1135 17th St. N. W.
- KEESECKER, WARD WILBUR (6), (W. Va.)..1929 K St. N. W.
- KELTON, ADELAIDE (60), (D. C.).....1827 Kalorama Road.
- KENDRICK, ELIZABETH H. (0), (D. C.)....The Cumberland.
- *KERNKAMP, LEILA MYRTLE (0), (Minn.)..433 Mt. Pleasant St.
- *KINSEY, GRETCHEN WOODSIDE (0), (Pa.)..407 Randolph St.
- †KIRKBRIDGE, MRS. IRENE HYTREE (0), (Ohio).....626 Rock Creek Church Road.
- LANGSHAW, GERTRUDE HOPE (48), (Mich.)..Government Hotels, C-D Bldg.
- LARAMY, RUTH GLADYS (0), (Minn.).....3433 Mt. Pleasant St.
- *LAWRENCE, LENORE LOUISE (0), (Mich.)..3212 Park Place.
- *LAWSON, MARGARET LUCILE (54), (D. C.)..206 13th St. N. E.
- †LEWIS, ELIZABETH STANTON (0), (D. C.)..3316 Mt. Pleasant St.
- LOMAN, MARY EUGENIA (58), (Md.).....Sherman Ave. Takoma Park.
- LOUX, LLOYD FOX (0), (Pa.).....1135 17th St. N. W.
- *LOVE, RUBY (0), (Mo.).....130 Bryant St.
- LUCAS, BERTHA LOVELL (54), (D. C.)....25 N St. S. E.
- MCCARTY, CORA (102), (D. C.).....1729 H St. N. W.
- MACON, LENA (18), (Ill.).....3923 14th St. N. W.
- MAGRUDER, MARY (65), (Md.).....Rockville, Md.
- *MAKOWICZM, BESSIE LORRAINE (0), (W. Va.).....1724 Park Road.
- †MANGELS, MRS. CLARA SHERMAN (0), (Md.).....225 Oak St. Takoma Park.
- †MANGUN, CLARA BELL (0), (Ohio).....120 Md. Ave. S. W.
- †MARSHALL, EMMA BLANCHE (0), (D. C.)...1317 Rhode Island Ave.
- MARTZ, MARGUERITE URSULA (56), (Md.)..1700 I St. N. W.
- MATTHEWS, ETTA HELENE (85), (D. C.)...1223 Euclid St.
- MATTHEWS, FRANCES MARIE (0).....18 Bryant St.
- MAXSON, EVELYN JULIET (68½), (D. C.)..647 E. Capitol St.
- MEEK, LOIS HAYDEN (74), (D. C.).....1831 California St.
- *MERRICK, DELLA E. (0), (N. Y.).....Stratford Hotel.
- *MERRIKEN, MARGARET IRENE (0), (Md.)..127 Maryland Ave. N. E.

- MEYER, ELLA LYDIA (53), (Neb.)..... Government Hotels, G-H Bldg.
 *MYERS, CLARA BELLE (8), (D. C.)..... 3214 Wisconsin Ave.
 MINOR, MRS. ISABEL MAYNARD (52), (D. C.)..... 129 Varnum St.
 MINOR, IVA GOLA, (67½), (Mo.)..... 1324 Kenyon St.
 *MOHLO, LILLIAN IRENE (0), (Mich.)..... 1110 P St. N. W.
 †MONRED, RAVENELL ANNESLEY (0), (Md.)..... Gaithersburg, Md.
 MOODY, ADA C. (48), (D. C.)..... 1512 P St. N. W.
 MOORE, DELLAR SEARS (0), (Ill.)..... 1408 15th St. N. W.
 †MOORE, GEORGE MANSFIELD (0), (Ky.)..... 621 Rock Creek Church Rd.
 *MOORE, MARGARET MYRTLE (30), (D. C.)..... 656 Massachusetts Ave. N. E.
 *MORAN, KATHLEEN MARY (0), (Ind.)..... 601 E St. N. W.
 MORTIMER, Florence Craigie (46), (D. C.)..... 1141 New Hampshire Ave.
 *MORTIMER, LUCILE ELIZABETH (0), (D. C.)..... 1141 New Hampshire Ave. N. W.
 *MOUNT, RUTH M. (0), (D. C.)..... 219 Pennsylvania Ave. S. E.
 MULFORD, MRS. BESSIE BOYD (114), (D. C.)..... 1731 Columbia Road.
 MURRAY, HARRIET LENORE (54), (D. C.)..... 120 Third St. N. E.
 †*NELSON, CHRISTINE ARNOLD (0), (Ky.)..... 1337 15th St. N. W.
 NELSON, CLARISSA ADELINE (12), (N. D.)..... 2524 17th St. N. W.
 NEWLOVE, MRS. MERLE WHITE (94½), (Ill.)..... 713 19th St. N. W.
 NEWLOVE, IVADEL ELSIE (61), (N. D.)..... 713 19th St. N. W.
 NICHOLS, VIRGINIA M. (48), (D. C.)..... 2144 F St. N. W.
 NICHOLS, DOROTHY VALENTINE (0), (Md.)..... 6402 Connecticut Ave. N. W.
 NICHOLS, HERBERT BARKER (33), (D. C.)..... 6402 Connecticut Ave. N. W.
 NOLAN, MARGARET COX (0), (N. Y.)..... 1819 G St. N. W.
 *O'DONOGHUE, ALICE C. (0), (D. C.)..... 2300 First St. N. W.
 OFFUTT, VIOLA (115), (Md.)..... Bethesda, Md.
 †OLDHAM, ELIZABETH GRACE (0), (Fla.)..... Government Hotels, V-W Bldg.
 *OLIN, SARAH (14), (Mich.)..... 1400 Fairmont St.
 ORYNSKI, WANDA (113), (Tex.)..... 2008 G St. N. W.
 *PARKER, CORDELIA JANE (0), (Ill.)..... 4121 9th St. N. W.
 PATTERSON, MARGARET ST. CLAIR (0), (D. C.)..... 3107 N St. N. W.
 PAYNE, LILLY MAY (84), (Va.)..... Ballston, Va.
 PERLMAN, REBECCA (60), (D. C.)..... 608 Louisiana Ave. N. W.
 *PETZOLD, NELLIE (0), (Calif.)..... 1603 Connecticut Ave. N. W.
 POINDEXTER, MATTIE (66), (Ky.)..... 1410 11th St. N. W.
 POLLOCK, LAURA KERSEY (67), (Va.)..... Victoria Apartments.
 POWELL, LUCY CHANDLER (0), (Va.)..... 1626 6th St. N. E.
 PRICE, LILLIAN PEARL (0), (Del.)..... 1802 M St. N. W.
 QUINN, DAVID LONG (0), (Md.)..... 2211 H St. N. W.
 RANDALL, BERNICE (103), (D. C.)..... 2035 F St. N. W.
 REED, MARGARET DAVIS (104), (D. C.)..... 2809 14th St. N. W.
 REEVES, RUTH ELIZABETH (62), (Va.)..... Falls Church, Va.
 †REYNOLDS, ALICE LOUISE (0), (N. Y.)..... 128 12th St. N. E.
 †RHODES, FREDDA (0), (Pa.)..... 2721 11th St. N. W.
 RING, GRETCHEN (86), (D. C.)..... 1215 Harvard St.
 ROBERTS, EVELYN MILLER (48), (Pa.)..... 1733 20th St. N. W.
 ROBERTS, HARRIET SHEPHERD (105½), (Pa.)..... 1733 20th St. N. W.

- ROGERS, MRS. FLORENCE HOPKINS (66),
(D. C.).....1104 Euclid St. N. W.
- ROD, EVA (0), (D. C.).....2104 18th St. N. W.
- RODGERS, BERTHA (110), (D. C.).....1445 Massachusetts Ave. N. W.
- ROSE, MARY ESTELLE (105), (D. C.).....2963 Tilden St. N. W.
- *ROUSE, GEORGE (0), (Oregon).....1819 G St. N. W.
- *ROUSE, MARY (0), (Oregon).....1819 G St. N. W.
- RUE, HAROLD PERCY (101), (Pa.).....54 Bates Street
- *RUNYAN, GRACE E. (84), (Neb.).....Peru, Neb.
- RYAN, FANNIE MERRITT (17), (N. J.).....Hyattsville, Md.
- SABELLA, RICARDO HICETA (0), (Philip-
pines).....100 Eye St. N. W.
- SAGE, LILLIAN WARFIELD (96½), (Md.).....Rockville, Md.
- SANDERS, RUTH (0), (Texas).....Government Hotels, E-F.
Bldg.
- SATTERFIELD, LUNA ELSIE (0), (N. C.)...322 A St. S. E.
- SCHAHRE, ANNA MAGDALENE (0), (Ill.)...1619 17th St. N. W.
- *SCOTT, HYACINTH (0), (Pa.).....1227 Florida Ave. N. E.
- SCOTT, PAULINE (84), (D. C.).....The Balfour.
- SELAH, MIRIAM HUGHES (88), (D. C.)...17 Third St. N. E.
- †SEWELL, MARGUERITE ALICE (0), (Kan.)...1407 W St. N. W.
- *SHAFER, MARY MANDILLA (0), (Ind.)...Government Hotels, P-Q Bldg.
- SITLER, MARGARET ANNE (65), (D. C.)...417 11th St. N. E.
- SLAYTON, MARY RUTH (0), (Idaho).....1326 Massachusetts Ave.
- SMITH, EDNA SOPHIA (86), (Mich.).....1320 10th St. N. W.
- SMITH, MAURICE MERLE (90), (Okla.)...2511 14th St. N. W.
- SMITH, ZEULA ZONG (0), (Calif.).....2036 F St. N. W.
- SNOWBERGER, GARNET (0), (Ind.).....1744 T St. N. W.
- *SOSAMON, BONNIE (0), (Ill.).....1819 G St. N. W.
- *SPEISER, MARY ELIZABETH (34), (D. C.)...226 8th St. S. E.
- SQUIRE, MRS. MINNIE C. (54), (D. C.)...1349 Parkwood Place.
- *STACK, CLARA LOUISE (48), (D. C.)...3421 14th St. N. W.
- STALLINGS, MILDRED EVELYN (81), (D.
C.).....108 Tennessee Ave. N. E.
- *STEELE, SARA NEWTON (0), (Ga.).....1735 Willard St.
- †STEWART, CATHERINE MAUD (10), (Va.)...E. Falls Church, Va.
- STEWART, ELIZABETH TABB (91), (Va.)...E. Falls Church, Va.
- STEWART, MARY (6), (D. C.).....627 Maryland Ave. N. E.
- *STOVALL, MISS TOM (0), (Ala.).....1414 K St. N. W.
- *STRANTZ, ANNA LOUISE (33), (Ind.)...1837 M St. N. W.
- TAYLOR, MABELLE CLAIRE (16), (Ind.)...930 O St. N. W.
- †THIESFELDT, PAULINE ELIZABETH (0),
(Mass.).....1111 Fairmont St.
- THOMPSON, MARIE ADA (88), (Miss.)...1818 H St. N. W.
- THORN, LULA BASSETT (52), (D. C.)...627 Maryland Ave. N. E.
- THORNHILL, ANNIE COLLIER (0), (Va.)...3033 15th St. N. W.
- THOUR, EMILY ANNA (0), (D. C.).....736 11th St. N. E.
- TICE, JOYCE M. (0), (Minnesota).....Government Hotels, R-S
Bldg.
- *TODD, MARIE BOCKOVER (0) (N. Y.)...1279 21st St. N. W.
- TONGE, CATHERINE MARY (80), (D. C.)...401 Willard Courts.
- TROTTER, KATHARINE ELIZABETH (70),
(D. C.).....512 Rhode Island Ave. N. E.
- TWELE, GLADYS ROSAMOND (30), (D. C.)...Lanham, Md.
- *TYREE, ZELMA RIGBY (50), (D. C.)...1328 Maryland Ave. N. E.

- *ULEBERG, ANDREA (0), (Minn.).....1133 Allison St.
 VAIL, MARGARET LEE (0), (D. C.).....The Toronto.
 VAN DYKE, MABEL (15), (Ohio).....121 North Carolina Ave. S. E.
 *VAUGHT, LESSIE LEE (30), (W. Va.).....3720 New Hampshire Ave. N.
 W.
 WAESCHE, MARY ELEZE (0), (Md.).....6105 4th St. N. W.
 WALCOTT, MARIE ESTELLE (56), (D. C.)...410 6th St. N. E.
 WALSH, JOHN BERNARD (90), (Mont.)...442 Massachusetts Ave. N. W.
 WALTER, GERTRUDE ELIZABETH (90), (D.
 C.).....406 A St. S. E.
 WEYMAN, MOLLIE BEERS (112), (D. C.)...1310 Columbia Road.
 WHEATLEY, MARY ELIZA (100), (Va.).....2138 F St.
 WHITZELL, MARGARET EYA (64), (D. C.)...The Alabama.
 *WILLEY, BESSIE FERN (0), (Kan.).....1837 M St. N. W.
 †WILLIAMS, HARRIET MARTHA (0), (Pa.)...1827 2nd St.
 WILLIAMS, INEZ SPRAGUE (0), (Ohio)....1812 Ontario Place.
 WILLIAMSON, MARGARET (54), (Va.).....1725 H Street.
 †WILLIAMSON, MARY LILLIAN (0), (Va.)...1202 18th St.
 WILSON, JOSEPH HENRY (8), (Pa.).....1436 W St. N. W.
 B. S. in M. E., 1919, George Washington University.
 *WILSON, MARY E. (0), (Va.).....1155 Morse St. N. E.
 †WIMER, MARTHA ELIZABETH (63), (D. C.)...The Imperial.
 WOLF, HATTIE MARY (64), (D. C.).....2333 Ashmead Place.
 WOLFENBERGER, FLOY (91), (Mo.).....1436 R St. N. W.
 *WOLMAN, RENA (64), (Md.).....723 Lenox St. Baltimore, Md.
 WOOSTER, VIVIAN (0), (Mo.).....1749 Q St. N. W.
 *WORLEY, JOSEPH FRANK (0), (Ky.).....1118 10th St. N. W.
 *WRIGHT, OLIVE CATHERINE (0), (D. C.)...Wardman Park Hotel.
 *WRIGHT, RUTH A. (0), (D. C.).....Wardman Park Hotel.
 WYLAND, GRACE (0), (Wyo.).....The Gordon.
 †YOUNG, HILDA MAY (52), (D. C.).....1312 Belmont St. N. W.

SPECIAL STUDENTS

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 *ALRICK, ANDREA JOSEPHINE (Mont.)...Government Hotels, P-Q. Bldg.
 BEKER, MARIE ANTOINETTE (N. Y.).....1455 Belmont St.
 A. B., 1916, Hunter College.
 CRADY, ANNA CECILIA, (Md.).....The Cairo.
 DOWNEY, JANE (D. C.).....3305 Georgia Ave.
 FITZHUGH, SALLIE PANNILL (Va.).....506 B St. N. E.
 GOULD, MRS. IRENE METTER (Alabama)....1115 8th St.
 *HOWARD, ELLA OLDHAM (Mass.).....929 New Hampshire Ave. N.
 W.
 HUME, KATHERINE B. (Ky.).....1326 Columbia Rd.
 *JENNERWEIN, KATHERINE (Germany)....2 Newland St., Chevy Chase.
 JESSUP, MAUD M. (Va.).....1601 30th St. N. W.
 *KEYSER, HERBERT FRED.....1439 Park Road.
 A. B. Colgate University.
 †KREIDER, DAISY BELLE (Ill.).....739 Quebec Place.
 LANCASTER, NELLE ELIZABETH (W. Va.)...201 Tennessee Ave. N. E.
 *LAWSON, MARGARET LUCILE (D. C.)....206 13th St. N. E.
 A. B. and T. D., 1914, George Washington University.
 MATHEWS, MARY C.....2472 Ontario Place.
 *MEYER, MRS. J. FRANKLIN (D. C.).....3727 Jocelyn St.
 *MILLS, ALICE ELIZABETH.....Government Hotels, R-S Bldg.
 A. B., Trinity College.
 MITCHELL, MRS. RENA S. (Ill.).....1314 Belmont St.

†PARKES, SARA JAY (D. C.).....	1711 Eye St.
*†PORTER, BEATRICE MARGARET (Maine).....	1819 G St. N. W.
REED, RUSSELL BAUER (N. J.).....	1218 Girard St. N. W.
RYDER, JOSEPHINE (Va.).....	2124 Pennsylvania Ave. N. W.
SALTER, KATNRYN CARY (Fla.).....	623 Newton St. N. W.
SMITH, ISABELLE (Ill.).....	6614 Harland Place, Takoma Park.
B. S., Valparaiso University.	
SMITH, JESSIE (Ky.).....	2224 F St. N. W.
SNOWDEN, ELIZABETH VICTORIA (D. C.).....	1818 Ingleside Terrace.
ST. JOHN, MRS. GRACE MARY ZINSSMEISTER (D. C.).....	1800 K St. N. W.
STEWERT, MARY MABEL (D. C.).....	127 3rd St. N. E.
A. B., 1914, Grove City College; A. B. and T. D., 1915, George Wash- ington University.	
*STONE, LUCIA MEY (Washington).....	1217 Franklin St. N. E.
THOMAS, MRS. HARRIETT ISABEL (Ky.).....	Rutland Courts.
TONER, CAROLINE ESTELLE (D. C.).....	1814 Ingleside Terrace.
VAUGHN, EFFIE (Va.).....	1356 Emerson St. N. E.
WHITAKER, ANNE RUTLEDGE (Tenn.).....	1312 R St. N. W.
WISROTH, MINNIE AMANDA (Neb.).....	Government Hotels, V-W Bldg.

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ABEL, JAMES FREDERICK.....	Nevada
A. B., University of Nevada; A. M., Stanford University	
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B. S. in Engineering, Drexel Institute	
BAER, JOHN L.....	Pennsylvania
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BOYNTON, AMY C.	Ohio
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A. B., Western Maryland College	
BROWN, RADFORD	District of Columbia
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BURSON, MAY	Alabama
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A. B., Westminster	
CAMPBELL, JOHN C.	Washington
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B. S., University of South Carolina; M. S., Vanderbilt	
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A. B., Syracuse University	
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DE LONG, CARL R.	Ohio
B. S. in Chemical Engineering, Ohio State University	
DENNISON, A. ROBERT	District of Columbia
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HOMAN, L. S.....	Ohio
HONCIK, HILDA.....	Ohio
HONECKER, H. J.....	Pennsylvania
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HOWISON, MARION L.....	Virginia
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HUBER, JOSEPHINE M.....	District of Columbia
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HUNTER, PAUL B.....	Virginia
HURLEY, C. W.....	New York
HUTSON, RUTH BYERS.....	District of Columbia
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IDDINGS, RUTH M.....	Maryland
JAMES, FRANCIS B., JR.....	District of Columbia
JAMESON, MRS. HARRIET.....	Iowa
JANSON, LUCRETIA.....	Ohio
JAVELLANA, JOSE B.....	Philippine Islands
JOHNSON, DOROTHY V.....	District of Columbia
JOHNSON, EDWARD W.....	Texas
JOHNSON, HAROLD.....	Florida
JOHNSTON, WINONA W.....	Mississippi
JONES, ALICE.....	Missouri
JONES, F. MARION.....	Kansas
JONES, MARIE McM.....	Washington
JOOST, DAVID.....	Texas
KAIN, H. GLADYS.....	District of Columbia
KAMPE, ALBERT H.....	Michigan
KAUFFMAN, HARVEY E.....	Pennsylvania
KEEN, SADIE ERNESTINE.....	California
KEESECKER, WARD W.....	West Virginia
KELEHER, EDITH REYNOLDS.....	District of Columbia
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KENWARD, DELIA E.....	New York
*KERN, GEORGE A.....	Iowa
*KERN, RUTH H.....	Pennsylvania
KIEFER, CLARENCE M.....	Pennsylvania
LL. B., LL. M., National University Law School	
*KILDAY MARGARET.....	Texas
*KITTECH, ZHIVON.....	Serbia
LL. B., National University Law School	
LANAGHAN, KATE.....	Iowa
LANIGAN, ARTHUR L.....	District of Columbia
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LE BLANC, LAURA S.....	Ohio
LESTER, MAY M.....	Virginia
LIDE, LOUIS M.....	South Carolina
LINDOW, OSCAR H.....	Wisconsin

LINDSEY, MERRITT E.....	New York
LITTELL, NELSON	Indiana
LITTLE, DONALD	Kansas
LITTLE, MRS. EDWARD C.	Kansas
LITTLE, JOHN FRANKLIN, JR.	Georgia
L'MOORE, PARKER	North Dakota
LODGE, J. EDWIN	Maryland
A. B., Richmond College	
*LONG, MYRTLE C.	District of Columbia
*LONG, W. RODNEY	Massachusetts
LOOMIS, HELEN MAY	New York
LORD, BARBARA P.	Connecticut
LOUIS, MAX C.	District of Columbia
LUCAS, BERTHA L.	District of Columbia
LYNCH, OLIVE F.	Massachusetts
LYON, QUINTER M.	District of Columbia
McAUSLAN, FRANCES MAY	Massachusetts
B. S., Ohio University	
McCARTY, CORA	District of Columbia
McCLOSKEY, WILLIAM T.	District of Columbia
McGOVERN, LOUISE	District of Columbia
*McINTYRE, ELLA D.	Iowa
McKAIN, CARRIE	Pennsylvania
McKENDREE, LAURETTE	Ohio
McKENZIE, DORIS.	District of Columbia
McMANAMY, CARL D.	Michigan
MacEWEN, THOMAS T.	District of Columbia
A. B., George Washington University	
MacKAY, MRS. ANNA	Maryland
M. S., Purdue University	
MAHONEY, JOHN	Nebraska
*MAKENS, ADELAIDE	South Dakota
MANNING, J. RUEL	Maryland
A. B., Western Maryland College	
MARBURY, WILLIAM B.	Maryland
MARKS, FRANK H.	District of Columbia
MASON, MRS. EDITH E.	District of Columbia
MASON, LUCIUS RANDOLPH.	District of Columbia
LL. B., George Washington University	
MASSEY, MARLE F.	Kansas
MATHENY, MARY FRANCES.	Texas
MAUL, SARAH E.	Maryland
MAWHINNEY, JOHN A.	District of Columbia
MEAKIN, ALLAN G.	Ohio
*MERDIAN, BERTHA	Illinois
MERRICK, MANILA	Iowa
*METZEROTT, JOHN	Maryland
MICHELSON, BERNADETTE S.	Maryland
MIDDLEBROOK, CECILIA A.	Texas
MILLER, ODYER H.	District of Columbia
MILLER, RALPH F.	Pennsylvania
MILLS, AGNES J.	Colorado
MINER, ETHEL G.	Ohio
MINER, HELEN	Ohio
MONTGOMERY, JIMMIE ETHEL.	Alabama
MOORE, ARDALA	District of Columbia

MOORE, FRANK DEANE	Kentucky
A. B., George Washington University, LL. B., University of Virginia	
MOORE, GOGGIN EMERSON	Virginia
MOORE, MILDRED JOSEPHINE	District of Columbia
MORAWSKI, ARTHUR L.	Massachusetts
*MORESI, MARGARET	Louisiana
MORRIS, CHARLES SCOTT	Ohio
*MORRIS, MRS. M. T.	New Jersey
MOSKOVITZ, ADOLPH	District of Columbia
MOULTON, ETHEL L.	Mass.
MOXNESS, BENNIE A.	North Dakota
MULFORD, BESSIE BOYD	New Jersey
MURDAUGH, J. E. D.	Maryland
A. B., University of Virginia	
MUSE, FRANK A.	Virginia
MYERS, ALONZO F.	Ohio
MYERS, MYRON L.	Maryland
NELSON, CLARISSA A.	North Dakota
NELSON, LOREN E.	Rhode Island
NEWCOMER, HARRY E.	District of Columbia
NEWLOVE, IVADEL E.	North Dakota
NEWLOVE, MRS. MERLE WHITE	Illinois
NEWMAN, HARRY W.	District of Columbia
NICHOLS, HERBERT B.	Maryland
O'BRIEN, MILDRED A.	New York
O'CONNOR, H. J.	Pennsylvania
OFFUTT, VIOLA	Maryland
OGDEN, EDITH	Ohio
OHSOL, JOHANN G.	Mass.
*OKAMOTO, ISSAK	Japan
*OLD, JOHN D.	Kansas
OLIVER, ESTELLE	Texas
OLIVER, MAJOR FRED N.	Texas
ORYNSKI, WANDA	Texas
OSTBY, MARTHA J.	Minnesota
PAUL, GEORGE HURST	Nebraska
PAZOUR, MARIE A.	South Dakota
PEAKE, ISIDORE	District of Columbia
PECK, EILEEN	Rhode Island
PEIRCE, LOTTIE M.	District of Columbia
PENCE, GRACE	West Virginia
PERLIN, HARRY	New York
PERLSTEIN, SAMUEL	Colorado
PETERSON, CHARLES F.	Maryland
PHILLIPS, BERNHARDT	District of Columbia
PICKENS, HORACE D.	Mississippi
PLOYHAR, EFFIE I.	North Dakota
POINDEXTER, MATTIE	Kentucky
POLK, IRL	Mississippi
PRENDERGAST, BERTHA M.	Pennsylvania
*QUINN, DAVID LONG	Maryland
RALSTON, HELEN	Illinois
RANCK, JAMES B.	District of Columbia
RANDALL, BERNICE D.	District of Columbia

REED, EDWIN C.	District of Columbia
A. M., LL. B., George Washington University	
REED, FRED C.	District of Columbia
REED, MABEL C.	Montana
REED, MARGARET DAVIS	District of Columbia
REED, PAUL C.	Louisiana
REESE, KATHRYN	Pennsylvania
REESE, VIRGINIA	Maryland
REESE, WILLIAM E.	Louisiana
REEVE, FELICIA A.	District of Columbia
REEVE, LAURA W.	District of Columbia
REID, NEIL	North Dakota
REINBOTH, JOHN F.	Illinois
REITZEL, ALBERT E.	North Carolina
RICHARDS, HELEN	District of Columbia
RILEY, ALBERT A.	Ohio
RING, GRETCHEN	District of Columbia
RINI, JÉROME N.	District of Columbia
*RIORDAN, DAVID LOUIS	District of Columbia
ROBERTS BESSIE M.	Kansas
ROBERTSON, JEROME K.	Texas
ROCKOW, LEWIS	Wisconsin
A. B., George Washington University	
RODRIGUEZ, HARRIS J.	Louisiana
ROSENBLATT, LOUIS	New York
*ROTZLER, WILLIAM MICHAEL	Utah
ROWLAND, M. ELSTON	Tennessee
RUNYAN, GRACE E.	Nebraska
RYAN, ALFRED E.	District of Columbia
RYAN, FANNIE M.	New Jersey
RYDER, JOSEPHINE	Virginia
SAGE, LILLIAN W.	Maryland
SAGE, LORETTA F.	Michigan
SALZER, GEORGE W.	New York
A. B., George Washington University	
SANBORN, NORRIS H.	District of Columbia
SARGENT, ANNE M.	Massachusetts
SCHELFEFFER, FRANK	Illinois
SCOTT, RALPH S.	Illinois
SCOTT, WALTER C., JR.	District of Columbia
SEE, ERNEST A.	West Virginia
SELLARS, MRS. STELLA C.	Virginia
SHANDS, GEORGE K.	District of Columbia
SHAUGHNESSY, BERTINA	Illinois
SHEA, JAMES W.	District of Columbia
SHEPHERD, MARGUERITE	Arkansas
A. B., Virginia Intermont College	
*SHERRICK, REBURTA	New York
*SHOEMAKER, MARK MERCER	Maryland
*SHORT, ELLA AMELIA	South Dakota
SHORT, IDA ANTOINETTE	South Dakota
SKAPIAK, ANTHONY N.	New York
SMITH, AUDLEY L.	Iowa
SMITH, BESS J.	Ohio
SMITH, MAURICE M.	Oklahoma
SOSOMON, BONNIE	Illinois

SPEAR, ALBERT A.....	District of Columbia
SPENCER, MARY L.....	North Carolina
SPURR, F. A.....	Iowa
SQUIRE, MRS. MINNIE C.....	District of Columbia
STALLINGS, MILDRED E.....	District of Columbia
STEBEL, MADALIN A. C.....	Virginia
STEELE, CORNELIA.....	Georgia
STEIN, JOSEPH.....	New York
STEWART, ELWINNA.....	Ohio
STICKEL, JOHN F.....	District of Columbia
STONE, C. L.....	Indiana
STRAVER, MRS. JEANNETTE B.....	New York
A. B. and T. D., George Washington University	
SWAN, ALFRED LARSON.....	Minnesota
SWEARINGER, ANITA.....	Indiana
SWETT, TREVOR W.....	Massachusetts
A. B., Harvard University	
SWINSON, MARIE CLIFF.....	Illinois
TAPLEY, GLADYS.....	Virginia
*TATE, ORLEY A.....	Tennessee
TAYLOR, JANE.....	Pennsylvania
TEMIN, MORRIS.....	District of Columbia
THIESING, THEODORE H.....	New York
THOMAS, MRS. HARRIET I.....	Kentucky
THOMPSON, DAVID G.....	Illinois
A. B., Northwestern University; A. M., University of Illinois	
*THOMPSON, HARRY W.....	District of Columbia
B. S., George Washington University	
THOMPSON, THOMAS C.....	Pennsylvania
THORNHILL, ANNIE C.....	Virginia
*THORNTON, MAY A.....	Indiana
TODD, AUGUSTINE J.....	District of Columbia
*TODD, L. J.....	Ohio
TRACY, STANLEY J.....	Utah
TRUSSELL, BRANDON.....	Texas
A. B., University of Texas	
UNDERWOOD, MARY L.....	District of Columbia
A. B., George Washington University	
UNRUH, JUNE M.....	Kansas
USILTON, LIDA J.....	District of Columbia
*VANDERMARK, MARQUERETT.....	Pennsylvania
VAN NESS, ETHEL M.....	New Jersey
*VENABLE, BEN. W.....	West Virginia
A. B., Hampden-Sidney College	
VESTAL, PAUL W.....	District of Columbia
VICKERS, ROSE M.....	District of Columbia
VITALE, A. FRANCIS.....	Mississippi
WALKER, EFFIE L.....	Mississippi
WALL, MRS. LILLIAN T.....	Alabama
WALSH, HUMPHREY.....	District of Columbia
WALSH, J. BUTLER.....	District of Columbia
WALSH, JOHN BERNARD.....	Montana
WARING, PAUL.....	District of Columbia
WATSON, DOROTHY.....	Maryland

WEBER, ELSA.....	North Carolina
A. B., George Washington University	
*WELTY, LUCY.....	Indiana
A. B., Indiana University	
WENDT, ROBERT H.....	Iowa
WESLEY, GENEVIEVE.....	Iowa
WHEATLEY, MARY E.....	Virginia
WHITE, HELEN M.....	District of Columbia
WHITE, ROBERTA G.....	Maryland
WHITSON, ALICE I.....	North Carolina
B. S., State College for Women (N. C.)	
WHYTE, EUNICE.....	District of Columbia
WILGUS, FILMORA.....	Ohio
WILLIAMS, FELICIA.....	Florida
A. B., Florida State College	
WILLIAMSON, MARGARET.....	Virginia
WILLIAMSON, MARY L.....	Virginia
WILLIMAN, FRANK L.....	District of Columbia
WILSON, HERBERT.....	Tennessee
WILSON, JOSEPH H.....	Pennsylvania
B. S. in M. E., George Washington University	
*WINSJANSEN, ALMA M.....	Michigan
WOLMAN, RENA.....	Maryland
*WRIGHT, ANNA N.....	Maryland
WRIGHT, GRACE V.....	District of Columbia
WRIGHT, MARION L.....	District of Columbia
YAGLE, IRMA G.....	Alabama
YOHE, ETHEL C.....	District of Columbia
YOUNG, MRS. AUGUSTA FREEMAN.....	North Dakota
A. B., George Washington University	
ZEPP, EDWARD F.....	Delaware

SUMMARY

Graduate Students

Students in attendance.....	36	
Candidates for S.M. Degree.....	37	
Candidates for A.M. Degree.....	89	
Candidates for Ph.D. Degree.....	38	
Candidates for C.E. Degree.....	4	
Candidates for M.E. Degree.....	1	
	—	205

UNDERGRADUATE STUDENTS

Columbian College

Candidates for A.B. Degree.....	709	
Candidates for B.S. in Med. Degree.....	50	
Pre-Medical.....	82	
Special.....	1049	✓
	—	1890

College of Engineering

Candidates for B.S. in Arch. Degree.....	25	
Candidates for B.S. in Chemistry Degree.....	54	
Candidates for B.S. in Ch.E. Degree.....	46	
Candidates for B.S. in C.E. Degree.....	91	
Candidates for B.S. in M.E. Degree.....	95	
Candidates for B.S. in E. E. Degree.....	61	
Special.....	158	✓
	—	530

Teachers College

Candidates for A.B. and Teacher's Diploma.....	300	✓
Special.....	35	
	—	335

Professional Schools

Medical School.....	117	
Dental School.....	74	
School of Pharmacy.....	9	
Law School.....	752	
	—	952

Total.....	3912	
Duplicates.....	30	
	—	3882

SUMMER SCHOOL 1919

Summer School, Arts and Sciences.....	461	
Summer School, Law.....	207	
	—	668

MEDICAL SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF MEDICINE

An asterisk (*) before a name indicates student not in attendance through the year

FIRST YEAR

Bourstin, William	(N. Y.)	1006 M St. N. W.
Brown, Radford	(D. C.)	Apt. 4, The Ashley
Dean, Benjamin F. Jr.	(D. C.)	916 Mass. Ave.
Deep, Anthony Abraham	(D. C.)	800 9th St.
Earnest, John Paul, Jr.	(D. C.)	2123 N St.
French, Leslie Howson	(Pa.)	1320 Belmont St.
Harnsberger, Chas. Whitfield	Va.)	(Whitfield, R. F. D. No. 1, Rosslyn, Va
*Henderson, I. Parnell	(Ga.)	7 Iowa Circle, Apt. 31
Hodgkins, Bradley D.	(D. C.)	1623 R St.
Hicks, Braxton	(Mich.)	1335 H St. N. W.
Horwitz, Alec	(D. C.)	916 44 St. S. W.
*Martinez, Mercedes	(P. R.)	4518 Ga. Ave.
McClosky, William T.	(D. C.)	Apt. 5, 2205 Champlain St.
McChesney, Frank Marks	(D. C.)	129 Randolph Pl.
McGrath, Robert	(Ill.)	1339 H St. N. W.
Moody, Terrell, A. B.	(Ga.)	13 P St. N. E.
Matthews, Wm. Edward, Jr.	(Md.)	2017 H St.
Poster, Russell, H.	(Pa.)	419 N. Y. Ave.
*Preston, Williard F.	(Del.)	1335 H St.
Rechman, Benjamin	(N. Y.)	1410 Crittenden St.
Stuart, Majorie Shaw	(D. C.)	1315 12th St.
Skoretzky, Irving Daniel	(N. Y.)	306 M St.
Schwartz, Abraham T.	(D. C.)	1867 California St.
Wanlass, Stanley A., A. B.	(Utah)	3rd and E. Cap. St. Calu- met Apt.
*Wandalowski, Seraphim C.	(Pa.)	

SECOND YEAR

Cole, Hazen Eugene	(D. C.)	639 East Capitol St.
Cudney, Ethan B.	(Mich.)	2823 14th St.
Davis, Joshua William	(Pa.)	2032 F St. N. W.
Gaines, John Marshall	(Va.)	Alexandria, Va.
Gates, Herbert Stelwyn	(D. C.)	808 N. C. Ave. S. E.
Goldfain, Samuel	(Colo.)	1115 5th St. N. W.
Goldstein, Eli	(N. Y.)	306 M St. N. W.
Jacobs, Isidore Wm.	(N. Y.)	306 M St. N. W.
Jones, Robert Varnum	(Mich.)	2448 18th St.
Kain, Helen Gladys	(D. C.)	129 E St., N. W.

Loth, Mathilde	(N. Y.)	2123 18th St. N. W.
Peterson, Norman Vern	(Utah)	The Calumet, 3rd and East Cap. St.
Nordlinger, George	(D. C.)	3113 N St. N. W.
Reed, John Alton	(D. C.)	522 6th St. N. W.
Sager, Wm. Warren	(D. C.)	2823 14th St.
*Simonetti, Amalia Julia	(N. Y.)	101 N. Car. Ave. S. E.
Taylor, Robert Mitchell	(D. C.)	607 N. Car. Ave. S. E.
Weinstein, William	(N. Y.)	1320 L St. N. W.

THIRD YEAR

Alpert, Meyer Louis	(Conn.)	1118 13th St.
Beck, Richmond J.	(Wisconsin)	801 B St. S. E.
Bowen, Wilbur L.	(Va.)	1654 Hobart St.
*Bradley, Grover O., A. B.	(Utah)	1336 8th St.
Brooke, Deane F.	(N. D.)	3304 Holmead Pl.
Brenes, Alfred M.	(C. A.)	1115 Eye St.
Cadilla, Arturo	(P. R.)	919 Eye St.
Castro, Herman Rawson	(C. A.)	1115 Eye St.
Demopoulos, Christos J.	(Greece)	800 K St. N. W.
Dubrowsky, Jakov Leib	(S. C.)	1305 H St.
Dunsky, Frank	(N. Y.)	1118 13th St.
Eisinger, Walter Geo. Jr.	(D. C.)	3503 Wis. Ave.
Epstein, Nathan Joshua	(D. C.)	946 R. I. Ave.
Fischer, Aubrey David	(D. C.)	1744 Lanier Pl.
Franke, Frederick Arnold, B. S.	(Utah)	1242 Evart St. N. E.
Glenn, Joseph Burton	(D. C.)	1436 Meridian Pl.
Grozin, Maurice, A. B.	(Ohio)	1305 H St.
Guyenn, Ray Frederick	(Va.)	1322 Vt. Ave.
Herzmark, Maurice H., A. B.	(D. C.)	1631 Newton St.
Hopkins, Ira Jay, A. B.	(Utah)	115 Second St. N. E.
Ibrahim, Abd El Malik	(Egypt)	1334 11th St.
Johnson, Regena Cook	(Md.)	1814 G St.
Jones, Waldo Hilman	(La.)	3625 10th St.
Khan, Mirza Mahmood, B. S.	(Persia)	
Machlan, Harold Foor	(D. C.)	Takoma Park, D. C.
Marchena, Ricardo, B. A.	(Costa Rica)	927 N. Y. Ave.
Masson, Clement Buchanan	(N. Y.)	1320 12th St.
Millan, Lyle Jordon	(Va.)	1320 12th St.
Ney, Thomas Joseph	(R. I.)	1223 13th St.
Renner, Morris J.	(N. Y.)	1118 13th St.
Robinson, Wilfred J.	(Conn.)	1220 12th St.
Sano, Kaninosuke	(Japan)	3503 Wisconsin Ave.
Scott, James M., B. S.	(Kansas)	221 1st St. S. E.

Schultz, Charles Hamilton	(Pa.)	1322 Vt. Ave.
Sesta, Joseph, Ph.G., Ph.C.	(N. Y.)	707 22nd St. N. W.
Slutsky, Benjamin Lloyd	(Conn.)	1209 K St.
Sonneland, Sidney Gaylord	(Neb.)	1322 Vt. Ave.
Strongin, Herman F., Ph.G., Ph. C.	(Conn.)	1736 G St.
Tibbets, Lyman Brooke, Ph.D	(D. C.)	1636 17th St.
Williamson, Frederick Yates, Phar. D.	(N. C.)	1335 Vt. Ave.

FOURTH YEAR

Baker, Wallace Bruce	(D. C.)	326 F St. N. E.
Beachley, Ralph Gregory	(Md.)	1335 Vt. Ave.
Bland, William Marshall	(Va.)	University Hospital
Bradley, Everett Lamont, A. B.	(D. C.)	Falkstone Cts.
Crespo, Jose Eusebio	(P. R.)	1115 I St.
Dazey, George Kendal	(Texas)	1322 Vt. Ave.
Duffie, Don Hastings	(D. C.)	Flower Ave., Takoma Pk.
Freeland, Fred Bernard	(Wash.)	1814 G St. N. W.
Goodman, Wm. Dennis	(Va.)	Emergency Hospital
Griffith, Harold Moore	(Pa.)	Garfield Memorial Hosp.
Hayes, Thomas Hirst	(Va.)	307 S. Lee St. Alex. Va.
Hollingsworth, Russell Kuhner	(D. C.)	1364 Girard St.
Hollander, Ben	(Cal.)	University Hospital
Howe, Julian Menzo	(D. C.)	47 Carroll St., Takoma Pk.
King, Charlton Roper	(Mass.)	1204 M St.
Klemme, Roland Metzler	(Ill.)	1116 R. I. Ave.
Li, Kang	(China)	2014 Kalorama Rd.
Litvak, Abraham Myer, Ph. G.	(N. Y.)	1335 Vt. Ave.
Mandelos, Nicholas A.	(Greece)	811 14th St.
McKenzie, John Ernest	(S. C.)	Wash. Asylum Hosp.
*Munoz, Roque Narcisus A.	(Honduras)	1115 I St. N. W.
Newcomer, Emmet Emerson	(Pa.)	Garfield Hosp.
Phillips, John William	(N. C.)	1335 Vt. Ave.
Pitt, William Franklin, A. B.	(N. C.)	3453 14th St.
Ramsey, Herbert Percey, A. B.	(D. C.)	813 Mass. Ave. N. E.
Scala, Norman Philip	(D. C.)	918 South C. Ave. S. E.
Stibbs, Henry Weston Barnum	(N. Y.)	University Hospital
Stultz, Alvin Dey, A. B.	(N. J.)	817 13th St.
Thompson, Thomas Carlton	(Pa.)	Emergency Hospital
William, Frank Louis	(D. C.)	308 Kenois Bldg.
Zerbe, Jack Bertolette	(Va.)	Garfield Hospital

DENTAL SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF DENTAL SURGERY

FIRST YEAR CLASS

1919-20

*ARBEELY, THEODORE PAUL	D. C.	1439 U St. N. W.
BRASHEARS, WM. N.	Calif.	2006 F St. N. W.
BRICKNER, LOTTIE	N. Y.	1323 10th St. N. W.
BRENNAN, JOHN E.	Mass.	1017 K St. N. W.
BUTTS, CHARLES S.	D. C.	Bancroft Hotel
CHADWICK, SAM W.	D. C.	819 C St. S. W.
CORNELISON, ORPHA	D. C.	Apt. 1, 2633 Adams Mill Road
COX, JULIUS MURRAY	S. C.	940 N. Y. Ave.
DORTON, VIRGIL J.	Utah	Apt. 24, The Roland, 2d and Md. Ave. N. E.
GOLDSTEIN, JOSEPH	D. C.	917 4½ St. S. W.
HANCHETT, AMBROSE	Utah	113 Md. Ave. N. E.
HESTER, E. L. D.	N. J.	The Chastleton, 16th and R Sts. N. W.
HOROWITZ, MORRIS M.	D. C.	4129 9th St. N. W.
HUGULEY, HERBERT T.	Texas	George Washington Inn
HUSCHKA, LOUIS E.	N. Dak.	1012 10th St.
JOHANNESSEN, WILFORD N.	Idaho	647 Md. Ave. N. E.
KAPLAN, HARRY	D. C.	1461 Monroe St.
MOULTON, OVA L.	Ill.	1203 W. Main St., Morrison, Ill.
*MYERS, JOHN H.	D. C.	724 10th St.
ROSEN, JACOB	D. C.	138 V St. N. W.
*RHODES, OTIS WILES	Md.	418 12th St. N. W.
WASSERBERG, IRVING	N. Y.	1132 7th St. N. W.
YOUNG, GEORGE WASHINGTON	Pa.	1810 Calvert St. N. W.

SECOND YEAR

ARENDS, FREDERICK LOUIS	Mich.	1005 E St. N. E.
BARNHARD, JAMES L.	D. C.	1225 N. Y. Ave.
BLANK, SAMUEL H.	N. J.	504 Walnut St. Camden, N. J.
BONNETT, JOHN A.	Ohio	Huron, Ohio
CHASE, WM.	D. C.	710 14th St. N. W.
CHRISTOPHERSON, ALVIN R.	D. C.	Hotel Hamilton, 14th and K Sts.
DETWEILER, DANIEL L.	Va.	Herndon, Va.
FARIS, JAMES B.	D. C.	31 Bryant St. N. W.
GLEW, DON H.	D. C.	1008 Euclid St.
LEWIS, WM. E.	D. C.	1617 Irving St. N. E.
WOLF, MORRIS	D. C.	2333 Ashmead Place

THIRD YEAR

BURKE, WM. F.	Mass.	7 Clinton St., Amesbury, Mass.
BYER, NATHAN	N. J.	912 14th St. N. W.
COWLEY, WM.	Utah	123 N. W. Temple St., Salt Lake City, Utah
DOYLE, D. E.	Mass.	1209 K St. N. W.
GATES, THOMAS D.	D. C.	808 N. C. Ave. S. E.
GARCIA, F. G.	P. R.	42 Munoz Rivera St., Rio Pedras, Porto Rico
GRAY, MARION H.	D. C.	20 E. Braniard St., Pensacola, Fla.
HAMMOND, BENNET	Pa.	1845 Monroe St.
ISSERLIS, SIMON	Mass.	1209 K St. N. W.
JONES, CYRIL	N. Y.	1209 K St. N. W.
LONG, PHILIP	N. H.	2514 13th St.
LEIFER, EDWARD D.	N. Y.	1411 Harvard St.
LUBORE, JACOB	D. C.	1200 T St.
MOORE, WM. S.	N. Y.	1749 2d St. N. W.
NOTES, LOUIS	D. C.	302 M St. N. W.
ROLAND, DANIEL L.	Pa.	1433 Muhlenberry St., Reading, Pa.
SLIFKIN, LOUIS B.	N. J.	332 Franklin St., Bloomfield, N. J.
THEMPER, JOSEPH	Conn.	2413 2d St. N. E.
VOELKER, JOSEPH WM.	Va.	1541 8th St. N. W.

FOURTH YEAR

CHIGER, MARIAN	N. J.	40 N. Y. Ave.
COHEN, FRANK J.	Mass.	809 12th St.
CONE, NATHAN	N. J.	715 R. I. Ave.
FRANK, EARL BENNETT	R. I.	1224 Mass. Ave.
HOLSTEIN, DAVID	N. J.	1105 6th St. N. W.
JESKOWITZ, FRANCES R.	N. Y.	40 N. Y. Ave.
MARCUS, CALLIE KALMAN	N. J.	1105 6th St.
MARR, WM. W.	D. C.	1815 Vernon St.
OLINGER, MAURICE ROBERT	N. J.	715 R. I. Ave.
SILBERBERG, SAMUEL S.	N. J.	715 R. I. Ave.
SILBERBERG, MORRIS	N. J.	715 R. I. Ave.
SOLOW, LEO	N. Y.	715 R. I. Ave.
SWANSON, HENRY ALBERT	N. Dak.	1319 C St. N. E.
WEBER, LOUIS M.	N. J.	715 R. I. Ave.

*Not in attendance throughout year.

STUDENTS ENROLLED IN THE COLLEGE OF PHARMACY, 1910-20

LYNCH, MARCUS FILLMORE	D. C.	128 E Cap. St.
NICHOLSON, MARGARET M.	Va.	1000 Md. Ave. N. E.
NATHANSON, ESTHER	Russia	134 31st St., Newport News, Va.
PARKER, CLARENCE WALTER	D. C.	933 N St. N. W.
SUMMERS, CHARLES WINGATE	Va.	901½ Duke St., Alexandria, Va.
WILSON, DANIEL A.	Va.	1208 15th St. N. W.
WARFIELD, EDGAR ASHBY	Va.	119 Walnut St. Alexandria, Va.
WARFIELD, VERNON NORWOOD	Va.	220 S. Fairfax St., Alexandria, Va.
WARD, IDA CECILIA	Pa.	13 N. Washington St., Wilkes-Barre, Pa.

STUDENTS REGISTERED IN THE LAW SCHOOL

1919-1920

Names of students who have withdrawn or graduated are indicated by stars; those who have entered since February 2, 1920, by daggers.

Students who are college graduates are indicated by the degree, year in which it was received, and name of college conferring it.

Students who have had only part of a college course are indicated by the names of the colleges attended.

CANDIDATES FOR DEGREE OF BACHELOR OF LAWS

FIRST YEAR CLASS

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
ADAMS, LESLIE HAROLD George Washington University	D. C.	1637 Harvard Terrace
ALMIRANES, SILVERIO PASATIENYSO	P. I.	1635 L St. N. W.
ANDERSON, LIONEL GLENN	D. C.	732 21st St.
†ANDERTON, ROBERT HYDE B.S., 1916, Dartmouth College; C.E., 1917, Thayer School of Civil Engineering	R. I.	1769 Columbia Rd.
ANTHONY, JESSE	Ga.	1313 K St. N. W.
ARMSTRONG, JASPER HENDERSON	Tenn.	939 K St.
ASH, RAY A.B., 1918, West Virginia University	W. Va.	1903 H St. N. W.
†ATKINS, JULIA SPENCER	N. C.	1236 Columbia Road
ATWOOD, ELISE LINCOLN	Mass.	505 Randolph St.
†AUDAS, EDITH RUTH A.B., 1915, Syracuse University	N. Y.	3444 Mt. Pleasant St.
BAILEY, GEORGE RANEY A.B., 1918, University of Florida	Fla.	221 East Capitol St.
BALLANO, MARCUS M.	P. I.	912 19th St. N. W.
BANNISTER, DEVILLO ANDREW State University of Iowa	S. Dak.	1719 Corcoran St.
*BARGER, CORINNE	Va.	1841 16th St.
BARKMAN, WILLIAM E.	D. C.	218 8th St. S. E.
BARLOW, ALFRED M. Ohio University; Rio Grande College	Ohio	309 New Jersey Avenue S. E.
†BARLOW, HERBERT BOUTWELL	R. I.	U. S. Patent Office
*BARNARD, PHILIP ESSERY Exeter College, Oxford, England; The Inner Temple, London, England	D. C.	2024 N St.
*BAUER, EMMERICH HENRY	Md.	Rockville, Md.
BAUGHMAN, THOMAS FRANK George Washington University	D. C.	1330 Massachusetts Ave.
BEALL, DOROTHY JOYCE	D. C.	73 You St.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
BEALL, THOMAS EMMERT	D. C.	3607 Newark St.
BEHNE, JOE CARROL Oklahoma University	Okla.	Y. M. C. A.
†BEHNE, TOM DARL Oklahoma University	Okla.	Y. M. C. A.
†BELDEN, LILLIAN CATHARINE Ph. B., 1913, Hiram College	Ohio	1736 F St. N. W.
BENHAM, EDWARD VAUGHAN George Washington University; Catholic University of America	D. C.	U. S. Patent Office
BERG, CASPER ROBERT University of Wisconsin	Wis.	The Woodworth
BERRY, SYDNEY GRISWOLD Ch. E., 1916, Columbia University	N. J.	U. S. Patent Office
†BINGAMAN, CLARA MERRICK	Iowa	1647 Lamont St.
BLACK, SERANUS LEONARD	Okla.	1100 Vermont Avenue
BLACKBURN, FELIX EDWARD, JR.	Ala.	1530 K St. N. W.
BLADEN, ASHBY E. George Washington University	Va.	219 N. St. Asaph St. Alexandria, Va.
BLANKEN, DAVID George Washington University	D. C.	1408 6th St. N. W.
BOAT, MARION LOUIS	Iowa	1330 13th St. N. W.
BOSWORTH, EDWIN CARPENTER Ph. B., 1911, Brown University	Md.	1004 F St. N. W.
BOTELER, CHARLES M. George Washington University	D. C.	616 North Carolina Ave. S. E.
BRACHLOW, WILLARD HAYDEN	Minn.	Y. M. C. A.
BRAHAM, WILLIAM WALTER A. B., Westminster College	Pa.	34 Cedar St. Takoma Park
BRANDENBURG, MILLSON FRED'K	D. C.	Fendall Building
*BRAWNER, ELWIN IRVING George Washington University	Va.	6 Dupont Circle
†BROWN, VIRGINIA MAY Columbia Institute; Hollins College	Ala.	608 Mass. Avenue, N. E.
BURDICK, ROBERT CORTEZ A. B., Univ. of Chattanooga	Ala.	1751 P St. N. W.
BURNS, JAMES ALEXANDER	D. C.	217 13th St. S. E.
BURRIS, EVAN WEISINGER Southwestern University	Texas	George Washington Hotel
†BUSCH, HOWARD G.	Mo.	1725 Connecticut Ave., N. W.
BUSH, IDA LILLIAN	Ill.	36 W St. N. W.
BUTLER, AARON PRENTISS B. S., 1918, University of Vermont	Vt.	Y. M. C. A.
*BUTLER, JAMES ALVA	D. C.	207 C St. N. W.
BUTLER, MARION, JR. George Washington University	N. C.	1333 15th St. N. W.
*CALDWELL, MATTIE BELLE	Ala.	Apt. 41, The Cumberland
CALLAHAN, MILDRED RUBERTA A. B., 1919, George Washington University	Va.	213 South Fairfax St. Alexandria, Va.
†CANNING, HAROLD FRANCIS	Me.	1415 N St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
†CANTRELL, TILMAN BETHEL University of Illinois	Ill.	1100 Vermont Avenue
†CAREY, ALFRED BRADLEY A. B., Delaware College	Del.	House Office Building
CARLOSS, HELEN R.	Miss.	1314 L St.
*CARLSON, KNUTE EMIL A. B., 1915, A. M., 1917, University of Nebraska; Ph. D., 1919, University of Pennsylvania	D. C.	611 B St. N. E.
CARNES, CAREY W.	Ohio	1805 Kenyon St.
CARRIG, ROBERT FRANCIS	Conn.	1336 Eye St.
CASEY, ROSELLA George Washington University	R. I.	1878 Phelps Place
†CHANDLER, CYRIL C.	Ga.	1736 G St. N. W.
*CHAPIN, CHARLES DOUGLAS Yale University	D. C.	1801 16th St.
CHEBITHES, VASILIOS ISADORE A. B., Centre College of Kentucky	Ky.	Y. M. C. A.
*CHESNEY, LEE ROY	Neb.	4440 Kansas Ave.
†CHURCHILL, VIRGINIA HARRISON	Mo.	R. 330, N-O Bldg., Government Hotels
†CLARK, MARION MAYBELLE	Conn.	1314 11th St. N. W.
CLEVELAND, WASHINGTON IRVING University of Wisconsin	Md.	Kensington, Md.
CLOUGH, CECIL EDWARD Boston University; New Hampshire College	N. H.	Walter Reed Hospital
†COCHRAN, LEWIS MEANS B. S. South Carolina Military College	S. C.	15 S St. N. W.
†COE, CONWAY PEYTON A. B., Randolph Macon	Md.	Div. 11, U. S. Patent Office
COHEN, CHARLES ABRAHAM Dickinson College	N. J.	3031 11th St.
*COHN, HERMIONE W. A. B., 1918, University of Michigan	Ill.	R. 111, G-H Bldg., Government Hotels
*COLBERT, MARY ADELINE	Ind.	1024 Vermont Avenue
COLLINGS, KENNETH BROWN George Washington University	Va.	1200 18th St. N. W.
†COLLINS, ALVIN BRUCE	Va.	2028 North Capitol St.
CONE, NAOMI GREENE	Tex.	Apt. 7, The Carlton
CONWAY, MARCELL	D. C.	1510 R St. N. W.
†CONWELL, DONALD ELMER	Okla.	1811 3d St. N. E.
*COOKE, MARY REBECCA	Cal.	1401 Columbia Road
COOLEY, JAMES PASCHEL University of Virginia	Va.	8 Walnut St. Clarendon, Va
*COOMBS, WALTER EDWARD	Me.	2120 G St. N. W.
CORBITT, JESSE G. Alabama Polytechnic Institute	Ala.	1100 Vermont Avenue
CORNELL, RALPH G.	N. Y.	1227 11th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
COVINGTON, MARY SIMMONS	N. C.	A-B Bldg., Government Hotels
COX, JEROME ROCKHOLD	Md.	1736 G St. N. W.
A. B., Western Maryland College		
CRAMMOND, EARLE D.	D. C.	714 21st St. N. W.
Colgate University		
*CRANE, WILLED STEVEN	Ill.	208 13th St. N. E.
B. S. in E. E., 1913, Carnegie Institute of Technology		
*CROSS, JAMES GARLAND	Va.	Hotel Stratford
*DAGLEY, RUBY	Ky.	610 Randolph St. N. W.
M. A. Transylvania College		
DAILY, ALLAN FREDERICK	Utah	1427 21st St. N. W.
DAILY, JOHN RYAN	Ill.	6703 Georgia Avenue, Takoma Park, D. C.
Bradley Polytechnic Institute		
DANIS, RAYMOND SMITH	D. C.	30 9th St. S. E.
DAUGHERTY, DUNCAN WILMER	W. Va.	1422 11th St. N. W.
*DAVIS, JAMES HUGH	D. C.	3733 Jenifer St. N. W.
University of Georgia		
DAVIS, NATHANIEL PENISTONE	D. C.	1769 Columbia Road
A. B., 1916, Princeton University		
†DAY, SARA MILLIGAN	Pa.	1007 Douglas St. N. E.
Syracuse University		
DEE, JESSICA	Mass.	1712 17th St. N. W.
A. B., 1916, Wellesley College		
*DEFREES, RAYMOND GARFIELD	D. C.	2425 North Capitol St.
George Washington University		
DER BEDROSIAN, CHARLES	N. J.	419 Y. M. C. A.
*DETWILER, CHARLES PHILIP	D. C.	1858 California St.
DIAZ, BENITO DACANAY	P. I.	514 E St. N. W.
DIESERUD, HELGE		
CHRISTOPHER	D. C.	216 Maryland Avenue, N. E.
B. S. in M. E., 1918, University of Illinois		
*DIETZ, JOSEPH MARTIN	D. C.	4009 Marlboro Place, N. W.
Denver University; George Washington University		
*DIPPERY, ALMA GEORGIANA	Ala.	1763 P St. N. W.
DODD, ALICE MARY	N. Y.	3420 13th St. N. W.
DODD, ESTHER ELIZABETH	N. Y.	3420 13th St. N. W.
DODSON, FREDERICK WILLIAM	D. C.	1319 N St. N. W.
B. S. in Chem., Massachusetts Institute of Technology		
DOHERTY, EMMETT EDWARD	Mont.	1333 15th St.
DOLBY, BIRD HAGEN	D. C.	28 Seaton Place, N. W.
DOREMU, ROBERT ELLSWORTH	Mich.	2802 Wisconsin Avenue
DOWELL, MARIE LOUISE	D. C.	3026 Newark St.
A. B., 1919, Goucher College		
*DOXTATER, JACOB HARRISON	Wis.	1741 G St. N. W.
DUFFY, GERALD EUGENE	Pa.	Beacon Apartments, Calvert Street
DUNCAN, JAMES REESE	Va.	2034 G St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
DUNKER, WILL FRANK	Iowa	1010 K St.
DWORKIN, MEYER	Conn.	609 H St.
EARLEY, MARGARET MARY	N. H.	2515 University Place
University of Vermont		
EATMAN, PHELAN WILLIAMS	La.	2140 N St. N. W.
†EDEN, FRED J.	Ill.	1446 Harvard St.
†EDEN, SIEVERDENA HARMEL	Ill.	1446 Harvard St.
EDWARDS, JOHN JAMES	Tenn.	2511 14th St. N. W.
EDWARDS, ROBERT YARRINGTON	Ill.	515 6th St. N. E.
University of Illinois		
ELLIOTT, ELMER ADLAI	Ark.	1422 11th St. N. W.
*EMERY, GUSTAV HAROLD	D. C.	2232 Cathedral Avenue
Worcester Polytechnic Institute; George Washington University		
ENGELHART, GEORGE KEMP	Ill.	1322 L St. N. W.
*ENGLEMAN, IRVING HOWARD	D. C.	2018 Eye St. N. W.
*ENNEN, MIRIAM VIRGINIA	Md.	Riverdale, Md.
ESPEY, HENRY CLAY	D. C.	51 Adams St. N. W.
ESPEY, HOWARD HAMILTON	D. C.	2010 1st St. N. W.
George Washington University		
*FISHBACK, CLIFFORD		
LINCOLN	D. C.	1372 Kenyon St.
University of Pennsylvania		
*FITCH, BURDETTE M.	D. C.	Land Office Building
University of Kansas		
FOGLE, CHARLES DENT	D. C.	1428 C St. N. E.
†FOOTE, ELSIE LANGWORTHY	Vt.	20th and S Sts. N. W.
A. B., 1918, Middlebury College		
FORBES, WILLIAM HENRY	Mass.	1416 K St. N. W.
FRANKLIN, NEAL DOW	Md.	734 15th St. N. W.
FRIEDMAN, SAMUEL AARON	N. Y.	1416 9th St. N. W.
FULLER, LORA COLE	Ia.	1912 Irving St. N. E.
A. B., 1919, State University of Iowa		
FURLOW, GEORGE WILLARD	Minn.	218 2d St. N. E.
University of Michigan		
GATCH, THOMAS LEIGH	Md.	Care of Judge Advocate General, Navy Department
Grad., 1912, U. S. Naval Academy		
GEDIMAN, HERBERT WILLIAM	Mass.	48 R St. N. E.
GIBSON, JONATHAN CATLETT	Va.	3317 N St. N. W.
GLASS, DAVID ROSE	Cal.	428½ M St. N. W.
GLASS, JOHN DUEL	D. C.	700 10th St. N. E.
University of Kansas		
*GOLEY, LAWRENCE L.	Ill.	23 8th St. S. E.
*GONDRA, MANUEL	Paraguay	2172 Wyoming Avenue, N. W.
GORMAN, LOIS GATES	Pa.	1807 California St.
GRAHAM, JACK EDWARD	Okla.	1300 Massachusetts Avenue
GRANTHAM, DANIEL L.	D. C.	R. 469, House Office Bldg.
University of Georgia		
GREENE, ADELBERT JAY	Nev.	1219 K St. N. W.
A. B., University of Colorado		

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
GREENE, ALDIE ROSS A. B., 1910, Albion College, Albion, Mich.	Mich.	Div. 32, U. S. Patent Office
GRONNA, ARTHUR JACKSON George Washington University	N. D.	2219 California St.
GRONVALL, WALTER ROY	Minn.	655 G St. N. E.
GUIHER, JAMES MORFORD University of West Virginia	Pa.	Walter Reed Hospital Takoma Park, D. C.
GUINThER, PAUL JACOB A. B., 1913, Albright College	Pa.	1489 Newton St.
HAGAMAN, FRANK LESLIE University of Kansas	Kans.	Walter Reed Hospital Takoma Park, D. C.
HALE, RALPH COCHRAN	Tenn.	125 6th St. N. E.
HAMRICK, MAYMIE HERBERT	W. Va.	509 11th St. N. W.
*HANCOCK, MYRTLE INA B. S., Columbia University	N. Y.	The Ethelhurst, 15th and L Streets
HARDY, FRANKLIN EARL Union College, Schenectady, N. Y.	N. Y.	1222 Irving St. N. W.
HARLAN, JOHN GRAYDON University of Pittsburgh	Pa.	647a G St. N. E.
HARRAH, EUGENE BENJAMIN University of Pennsylvania	D. C.	1653 Newton St.
HARRIS, WILLIAM DELAWARE A. B., Miami University	Ohio	Department of Justice
†HARTMAN, JOE	Ohio	Income Tax Dept.
†HARVEY, JACK DENNISON Rhode Island State College	Conn.	3303 O St. N. W.
*HATCHER, JAMES CHANDLER Birmingham College; George Washington University	Ala.	1907 G St. N. W.
HAWLEY, HARRY REGAN University of Idaho	Idaho	1100 Vermont Avenue
HAYS, LAWRENCE BROOKS A. B., 1919, University of Arkansas	Ark.	1744 Riggs Place, N. W.
HENSON, EDWARD NEWELL B. S., 1914, A. M., 1917, Mississippi College	Miss.	2131 F St.
*HERRMAN, JOHN THEODORE	Mich.	1842 Calvert St.
HILLIARD, BENJAMIN CLARK, Jr. State University of Iowa	Colo.	1422 Massachusetts Avenue
*HINCKLEY, HEBER GRANT	Utah	751 Fairmont St. N. W.
HINDS, EUGENE REED	S. Dak.	817 13th St. N. W.
HIXSON, WILLIAM ALPHONZO	D. C.	624 Irving St. N. W.
†HOADLEY, MAUD ELIZABETH	Ore.	Wardman Park Hotel
HOAG, GEORGE FORREST Polytechnic Institute of Brooklyn	N. Y.	The Portner, 15th and U Sts.
HODGE, DAVID MALCOM A. B. in Econ. Swarthmore College	Pa.	1916 16th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
HOLLIDAY, MARION ELIZABETH	Ill.	78 V St. N. W.
HONEYCUTT, WILLIAM ELISHA	N. C.	112 3d St. N. E.
A. B., Wake Forest College		
HONTE, EMORY R.	Okla.	Room 26, 1320 New York Avenue
HORTON, ELEANOR BESSIE	Me.	820 Whittier St.
Boston University		
HOSSETTLER, BINAS	Ind.	1216 9th St. N. W.
†HOUGHTON, GRACE ADAMS	Wis.	3351 18th St. N. W.
A. B. University of Wisconsin		
†HUCKABEE, HENRY GRADY	Ala.	1832 Ingleside Terrace
George Washington University		
HUFF, JESSE	D. C.	521 18th St. N. W.
M. E., Ohio State University		
†HUGHES, GEORGE ERNEST	D. C.	129 3d St. N. E.
University of Texas		
HUGHES, WILLIAM ARTHUR	N. Y.	1460 Monroe St. N. W.
B. S., 1915, Union University		
HUNDLEY, JAMES CURRY	Cal.	326 11th St. N. E.
George Washington University		
HUNT, WARREN HANSELL	D. C.	2305 18th St.
JACKSON, ALBERT LESLIE	Tex.	1722 35th St.
University of Texas		
JACKSON, ELMER J.	Pa.	1348 Irving St. N. W.
Muhlenberg College		
JENKINS, BEN	Ill.	424 Kenyon St. N. W.
JEPSON, MELVIN	Nev.	1381 Irving St. N. W.
B. S., 1911, University of Nevada		
*JOHNSON, CLAIR V.	Iowa	1829 19th St. N. W.
George Washington University		
JOHNSTON, DOROTHY BEARD	Cal.	1301 K St. N. W.
JONES, HOMER WILLIAM	Pa.	1006 M St. N. W.
KATZ, WILLIAM	N. Y.	511 L St. N. W.
B. S., 1914, College of City of New York		
*KELISKY, BESSIE BENDER	Va.	1439 T St. N. W.
George Washington University		
KELLY, CLARE REGINA	Vt.	2306 1st St. N. W.
KENNEDY, EDWIN RUSSELL, JR.	D. C.	1753 N St. N. W.
KEOGH, JOHN JOSEPH	N. Y.	The Brunswick
A. B., Manhattan College		
KETNER, HENRY ERNEST	N. C.	2140 N St. N. W.
KETNER, JAMES THOMAS	N. C.	2140 N St. N. W.
KILPATRICK, HOWARD CECIL	Ala.	328 Senate Office Building
Alabama Polytechnic Institute		
KIRBY, HOMER H.	Ohio	1815 F St. N. W.
George Washington University		
*KITSON, FORREST GARFIELD	Ohio	Apt. 62, The Plymouth
KLINE, VIRGIL CLAUDE	Va.	26 Harrison St., Cherrydale, Va.
B. S., in Education, 1917, University of Missouri		

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
KNOCK, FRANKLIN George Washington University	D. C.	3423 14th St. N. W.
KNOWLTON, ALFRED SMITH University of Minnesota	Minn.	2035 Park Rd.
*KUDISH, SAMUEL	N. J.	2022 Portner Place
KUZMAK, JOHN STEPHEN	Pa.	R. 415, Y. M. C. A.
LACY, OLIVE BEATRICE	N. J.	1347 Girard St. N. W.
LA FOLLETTE, GEORGIA E. University of California; Washington State College	Idaho	1203 Columbia Rd.
LA FOLLETTE, PHILIP FOX A. B., 1919, University of Wisconsin	Wis.	3320 16th St. N. W.
LAPPIN, MARY	D. C.	122 V St. N. W.
LARKIN, THOMAS DILLARD	Va.	Washington Navy Yard
LARSON, JOHN EMIL George Washington University	Me.	1758 S St. N. W.
LASSEN, EARLE CHARLES	D. C.	1017 K St. N. W.
LAUSEN, ARTHUR E.	Conn.	P. O. Box 1259
*LAW, ANNIE JOE Lander Tinsdale College, Greenwood, S. C.	Fla.	1354 Fairmont St. N. W.
†LEE, EDNAH MCKINLEY	D. C.	1309 Quincy St. N. W.
†LEGER, BENOIT LELAND B. E., 1911, University of Michigan	N. Y.	715 5th St. N. E.
LEVY, OSCAR ISAAC B. Sc., 1914, and M. Sc., 1916, University of Chicago	La.	U. S. Patent Office
L'HOMMEDIEU, SAMUEL	D. C.	1322 6th St. N. W.
LIDDELL, M. VONCILE University of Texas	Texas	The Alabama, 11th and M Sts.
LIPCHES, ESTHER	N. Y.	X-Y Building, Government Hotels
LITTELL, NELSON Purdue University; George Washington University	Ind.	3149 Mount Pleasant St.
LITTLETON, MARY VIRGINIA,	W. Va.	916 Eye St. S. E.
LITZELMAN, MARIE E.	Pa.	713 19th St. N. W.
LLOYD, WILLIAM KENYON U. S. Military Academy	D. C.	1336 Eye St. N. W.
LODGE, THOMAS ELLIS	Del.	Y. M. C. A.
*LOGAN, DANIEL N. George Washington University	D. C.	21 Bates St. N. W.
†LONGSTREET, WILLIAM CARL, JR. B. S. in Econ., 1919, University of Pennsylvania	N. J.	1653 Newton St. N. W.
LUCAL, IRA DAVID George Washington University	Ohio	1479 Monroe St.
LUCE, LLEWELLYN ATSETT Montana State College; University of Chicago	Mont.	215 2d St. S. E.
MARSHALL, CARL A.	D. C.	1213 N St. N. W.

Name	Legal Residence	Address
MARSHALL, CLINTON LEE	Va.	918 Washington Loan & Trust Building
MARSHALL, ROBERT WALLACE	Ky.	1104 Vermont Avenue N. W.
MARTINSON, DETLOW MAINCH George Washington University	D. C.	1842 Calvert St. N. W.
MARTIN, WALLACE HAROLD A. B., Indiana University	Ind.	508 19th St. N. W.
†MAXFIELD, EFFA	Mich.	1416 F St. N. E.
MCCARTHY, EDWARD, JR.	Va.	Cherrydale, Va.
MCCASLIN, WALTER WOOD	Va.	2501 Pennsylvania Avenue
MCCLAINE, CLIFFORD HALE	W. Va.	1628 Hobart St.
MCCOY, PHILBRICK	D. C.	The Wyoming Apartment
MCCULLOUGH, JOSEPH EAGLESON	Pa.	1107 P St. N. W.
MCCULLOUGH, WINNIE D.	Okla.	1800 New Hampshire Avenue
MCDARIS, VIVIEN LOIS Washington University	Miss.	2400 16th St. N. W.
MCDUGAL, JOHN LEWIS University of Missouri	Iowa	1202 O St. N. W.
McFALL, CATHERINE	Ind.	935 Westminster St. N. W.
McHENRY, JOHN GEISER, JR. George Washington University	Pa.	1104 Vermont Avenue
McINTOSH, SAMUEL WALLACE	D. C.	Apt. 32, 128 C St. N. E.
McKINLEY, LLOYD HENRY	W. Va.	214 2d St. N. E.
†McPHERSON, JOE FRANCIS George Washington University	Mo.	1746 K St. N. W.
McVAY, WILLIAM WALTER	Pa.	Walter Reed Hospital
MEADOW, HILDA Wesleyan College	Ga.	1322 L St. N. W.
*MEWER, WESLEY MILLIKEN Carnegie Institute of Technology	Me.	705 E St. N. E.
MILLER, ELVIE EARL	Texas	13 Randolph Place N. W.
MILLER, WARREN EDWARD George Washington University	Ind.	Y. M. C. A.
†MILLS, HELENA JANE N. Y. State College	N. Y.	R-S Bldg., Government Hotels
MITCHELL, WADE HAMPTON	D. C.	206 C St. N. W.
*MITTER, PAUL LOUIS	Mich.	1842 Calvert St.
†MONK, JOHN HENRY Texas Christian University	Tex.	161 Kentucky Avenue
MONTGOMERY, ANNA CARROLL	D. C.	1743 Rhode Island Avenue
MORGAN, ROBERT ELMER A. B., Arkansas University	Okla.	1744 Riggs Place N. W.
MORRIS, JOHN G.	Ky.	232 Randolph St. N. E.
MOUNT, THOMAS FLIPPIN	Tenn.	U. S. Court of Claims
MYERS, LAWRENCE CRAMER	Mont.	1333 L St. N. W.
MYERS, ORIE EUGENE	Ga.	1116 9th St. N. W.
MYRES, EUSTIS	Texas	1328 Vermont Avenue
*NELMS, HENNING CUNNINGHAM George Washington University	D. C.	1121 12th St. N. W.
†NEVILLE, JAMES HARVEY A. B., Drury College	Mo.	113 4th St. N. E.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*NEWELL, WILLIAM CLIFTON University of North Carolina	N. C.	2511 14th St. N. W.
NEWMAN, LAWRENCE GILBERT	D. C.	3617 New Hampshire Avenue N. W.
NICHOLS, ROSS MANNING	N. J.	1422 Massachusetts Avenue N. W.
NICKLES, JAMES PEARSON	S. C.	Washington Barracks, D. C.
NIELSEN, GEORGE LEONARD	Utah	1333 15th St. N. W.
George Washington University		
NOE, EDWARD TERRIS, JR. B. S. in E. E., 1914, University of Pennsylvania	Pa.	Div. 22, U. S. Patent Office
NUTT, ROLLAND LEE	Ill.	1018 Munsey Building
ODELL, ROBERT RUSSELL	S. Dak.	100 W St. N. W.
*O'HANLEY, JOHN SCHNEIDER	R. I.	1868 California St. N. W.
*OLMSTED, VICTOR CARLETON George Washington University	Va.	Clarendon, Va.
OSNES, OLAF WALTER	S. Dak.	2028 G St. N. W.
OVERSTREET, WALTER EVERETT	D. C.	R. 495, House Office Bldg.
PAGE, PROCTOR HULL	Vt.	311 Senate Office Building
†PALMEDA, LUIS JUAN	P. I.	1339 Shepherd St.
PAMINTUAN, PAZ	P. I.	3615 Newark St. N. W.
PARKER, WARREN H.	D. C.	1414 Girard St. N. W.
†PATTERSON, JOHN HOWELL, JR. A. B., 1919, Davidson College	Fla.	337 Senate Office Building
PAYNE, HORACE DURANT A. B., 1917, University of Missouri	Okla.	
PENROD, HERMAN GARFIELD	Ohio	1311 Fairmont St.
PERLIN, HARRY Georgetown University; George Washington University	N. Y.	2219 H St. N. W.
†PETERMAN, JAMES CUYLER	La.	1119 Euclid St. N. W.
PIEPGRASS, CHARLES SPURGEON University of Oklahoma	Okla.	1445 R St. N. W.
PLAGENS, HENRY JAY	Kans.	2611 Adams Mill Rd.
POLLITT, BASIL HUBBART A. B., 1917, University of Cincinnati	W. Va.	529 18th St. N. W.
PORTER, CHARLES W. De Pauw University; Ohio University	Ohio	1328 Fairmont St.
POTTER, MAURICE RAY	Ill.	23 8th St. S. E.
*POWELL, HELEN Pomona College	Cal.	1316 15th St. N. W.
RAINE, WENDELL PHILLIPS B. S. in E. E., 1907; M. A., 1911; University of Pennsylvania	Pa.	1731 S St. N. W.
RAUBER, MARGERET ELIZABETH	N. Y.	2122 Connecticut Avenue
REVELLE, DEAN MCDARIS	Miss.	2400 16th St. N. W.
*REYNOLDS, JOHN BERNARD	Minn.	632 Y. M. C. A.
†RICHARDSON, PHYLLIS MARY A. B., 1918, University of Michigan	N. Y.	Apt. 51, The Victoria

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*RICHART, GENEVIEVE	Ill.	1712 Lanier Place, N. W.
*ROBERTS, RICHARD EDWARD, JR.	Pa.	2544 14th St. N. W.
ROBINSON, JOHN GREENE	Ky.	232 Randolph Place N. E.
†ROCHESTER, GEORGE WILLIAM University of Chicago	Ill.	1414 Mass. Avenue
ROCKOW, ARTHUR	Wis.	902 Westminster St.
†ROGERS, WILLIAM ADDISON, 2d Renssallaer Polytechnic Institute	D. C.	1756 Lamont St. N. W.
ROLLINS, JAMES FRANKLIN	Okla.	Y. M. C. A.
ROME, HYMAN PAUL	Md.	Bladensburg, Md.
ROSENBERGER, CHARLES RUPLEY	Md.	2420 14th St. N. W.
ROSS, WILLIAM WARFIELD	D. C.	1618 29th St. N. W.
RUDD, SPENCER TYLER	Minn.	R. 379, House Office Bldg.
†SALDANA, JUAN BAUTISTA	D. C.	The Dunsmere
SALL, NED EDWARD	D. C.	1447 R St. N. W.
SANDOE, NICHOL MAIN B. S., 1919, Dartmouth College	D. C.	235 12th St. N. E.
SARTWELL, FRANKLIN GADAGHER	D. C.	1022 Spring Rd. N. W.
SAUNDERS, RANDALL N. George Washington University	D. C.	1323 Columbia Rd.
*SCHNEIDER, JOHN THOMAS A. B., 1919, The University of the South	Tenn.	Care of G. H. Q., A. E. F., 7th and E Sts.
SCOTT, RALPH SINHAL George Washington University	D. C.	1512 21st St. N. W.
*SEATON, ARTHUR J. The State University of Iowa	Iowa	2215 14th St. N. W.
SEE, ERNEST ALDINE George Washington University	W. Va.	1739 P St. N. W.
SEELEY, BROMLEY	D. C.	The Dresden
*SELBY, JOHN MAHLON	D. C.	R. F. D. 2, Bethesda, Md.
SHANHOLTZER, JAMES CLINTON	W. Va.	2030 G St. N. W.
†SHEA, MICHAEL FRANCIS A. B., 1915, Middlebury College	Conn.	1109 M St. N. W.
SHEFFIELD, EDGAR L. George Washington University	Idaho	1740 K St.
†SHETZEN, WILLIAM Maryland State College	N. Y.	908 L St. N. W.
*SHINNICK, HARRY ALLISON University of Virginia; Georgetown University; George Washington University Colgate University	D. C.	1252 31st St. N. W.
SHINNICK, HERBERT HANSERD George Washington University University of Liverpool	Va.	1252 31st St. N. W.
*SHOEMAKER, MARGERET AMELIA	Pa.	Y. W. C. A. House, Silver Springs, Md.
SHUMAKER, FREDERIC ARTHUR	Kans.	Apt. 35, The Cumberland
SIMMONS, RUSH NELSON George Washington University	Minn.	1404 M St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
SIMMONS, VERNE PHIL	Mo.	1829 19th St. N. W.
*SIMPKINS, DOROTHY KATHLEEN University of Nebraska	Nebr.	1760 Euclid St. N. W.
*SIMPSON, JESSE NOBLE George Washington University	D. C.	1825 Kalorama Rd. N. W.
*SIRE, SIGURD	Minn.	215 Indiana Avenue N. W.
†SLINGLAND, EARL JAMES Maryland State College	N. J.	937 Massachusetts Avenue
*SMITH, MARGARET MAY George Washington University	Md.	Riverdale, Md.
*SMITH, O. THAXTER	D. C.	431 Munsey Building
SMITH, TALMA L. George Washington University	Tex.	232 House Office Bldg.
SNEED, ERNEST CECIL	Tenn.	1913 14th St. N. W.
SNOW, CHESTER AMMEN, JR. University of Pennsylvania	Md.	710 8th St. N. W.
SNYDER, ROSS H.	Ill.	2119 Pennsylvania Avenue
SOMMERKAMP, FRANK MARCRUM, JR. University of Georgia	D. C.	602 A St. S. E.
SOMMERS, GOODLOE GOOCH	Va.	Office of Collector of Taxes, D. C.
SPEARS, CLEO CALVIN	Ohio	1360 Meridian St.
*SPENCER, CLAUD EDWARD University of South Carolina	S. C.	1319 Massachusetts Avenue
SPORKIN, M. WALTON, JR.	Pa.	1447 R St. N. W.
*SPRINGMANN, REGINA	D. C.	720 6th St. S. W.
STANLEY, CHILTON FISKE A. B., Earlham College	Ind.	1226 13th St.
STANTON, OSCAR DAVID A. B., Denver University; B. S., Colorado Agricultural College	D. C.	3310 Ross Place, N. W.
STEARNS, ORLO FOSTER George Washington University	Md.	Mt. Ranier, Md.
*STEBBINS, CHARLES ROWLAND Milton University	Md.	Apt. 158, The Cordova
STEELY, MAYE	Ala.	1224 13th St. N. W.
†STENDALL, OSCAR MORGAN	N. Dak.	144 A St. N. E.
STEPHENSON, FRANK TILGHMAN	Tex.	Hyattsville, Md
STEVENS, EUGENE ENSIGN, JR.	Md.	622 F St. N. W.
†STEWART, CHARLES BREKLEY, JR. University of Utah	Utah	100 4th St. N. E.
†STEWART, ELAM LAFAYETTE Monmouth College; Valparaiso University	Ill.	2650 Wisconsin Avenue
*STEWART, MARY MABEL George Washington University	D. C.	127 3d St. N. E.
STICKNEY, HARRY	D. C.	1443 Chapin St.
STOKES, WALTER RAYMOND	D. C.	508 Wardman Courts
STOLTZ, AUTHWIN	Ill.	1429 C St. N. E.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
STONE, CHARLES IRVING	N. Y.	1422 Massachusetts Avenue
SULLIVAN, JULIA PATRICIA	Md.	R. R. 2, Bethesda, Md.
SULLIVAN, STUART ARTHUR,	Mont.	637 E St. N. E.
†SUMMERALL, LEONIDAS FRANKLIN	Ga.	R. 427, Y. M. C. A.
SUMMERS, PAUL DILWYN	Wash.	1316 Euclid St. N. W.
SYMONS, NOEL SPEER	D. C.	1606 New Hampshire Avenue N. W.
†TAYLOR, BELOIT	Ark.	2511 14th St. N. W.
Southern Methodist University; University of Arkansas		
*TAYLOR, HENRY PORTERFIELD	Va.	Walter Reed Hospital
B. A., 1913; M. A., 1914; University of Virginia		
TAYLOR, JAMES HARVEY	Cal.	Office J. A. G., Navy
Grad., U. S. Naval Academy		Department
TEFFT, LIONEL V.	Ill.	1332 V St. N. W.
Dartmouth College; University of Chicago		
TEIBER, EDWARD ALVIS	Mo.	802 F St. N. E.
THOMAS, HENRY PHINEAS	Va.	1404 11th St. N. W.
University of Virginia		
TOMPSON, FRANK MARION, JR.	N. C.	947 Massachusetts Avenue
THOMPSON, GLENN M.	Ind.	932 North Carolina Avenue, S. E.
*THOMPSON, JESSIE LOUISE	Ill.	Apt. 502, Wardman Courts
THURMAN, ALLEN GROVER	Utah	382 House Office Bldg.
A. B., University of Utah		
TILGHMAN, SARAH AUGUSTA	Md.	1737 T St. N. W.
A. B., 1917, Goucher College		
TINNERMAN, CLIFFORD LOWELL	Ohio	108 3d St. N. E.
Ohio State University		
*TOLKINS, ABRAHAM MILTON	D. C.	2115 1st St. N. W.
*TOUHEY, MATTHEW PATRICK	Wis.	1741 Columbia Rd.
TOWERS, FREDERIC NEWTON	D. C.	1882 Columbia Rd.
TOWNSEND, IRVING UPSON, JR.	Mass.	1331 Belmont St.
A. B., 1915, Harvard University		
TRON, ROBERT A.	D. C.	2909 P St. N. W.
*TROUT, GEORGE ALEXANDER	Colo.	
A. B., 1915, University of Denver		
TURNER, BOLON BAILEY	Ark.	1744 Riggs Place N. W.
University of Arkansas		
*TYLER, EDWARD SCOTT	D. C.	2000 H St. N. W.
University of Virginia; George Washington University		
†UDALL, DON TAYLOR	Ariz.	Box 417, Y. M. C. A.
†URSUA, FRANCISCO ANTONIO	Colo.	2130 O St.
VANVEGHTEN, THEODORE	N. Y.	1222 Pennsylvania Avenue
SHAVER		Vienna, Va.
WAINWRIGHT, CHARLES EDWARD	Va.	
Bucknell University; Columbia University		
WALLER, RAYMOND MINOR	Va.	1404 14th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
FRENCH, WILLIAM THOMAS George Washington University	D. C.	Clarendon, Va.
GAYLE, CATHERINE JARVIS	Va.	Fort Myer Heights, Va.
GEIGER, OLIVE EVALYN Maryland College for Women	D. C.	2851 29th St.
GEIST, ROBERT LOUIS C. E., 1917, Rensselaer Polytechnic Institute	Conn.	515 Kenyon St.
GILLIS, HARRY A. A. B., 1914, Monmouth College	Iowa	Bureau of War Risk Insurance
GLASS, ROBERT LEWIS B. S., in E. E., 1913, Pittsburgh University	Pa.	4102 5th St. N. W.
HANSON, EDWARD J. George Washington University	N. C.	1333 15th St. N. W.
HARRIS, BRANTLEY C. A. B., 1917, Rice Institute	Texas	105 House Office Building
HAZEN, JOSEPH HARRINGTON George Washington University	N. Y.	1352 Kenyon St. N. W.
HECHMER, MARIE ANTOINETTE DOLORES	W. Va.	1606 K St. N. W.
HEITMULLER, RALPH EMMERT George Washington University	D. C.	1307 14th St. N. W.
*HENDON, CLAUDE	D. C.	1843 Calvert St.
HIGGINS, DANIEL ERNEST University of Maine	Me.	2133 F Street
HOFFMAN, JOHN EDWARD	Pa.	1712 15th Street
HOHENSTEIN, ARTHUR EDWIN George Washington University	Ill.	505 4th St.
HOLT, EVERETT GUY A. B., 1915, Colby College	Me.	715 19th St.
HOWING, HELEN PAULINE University of Missouri	Mo.	2523 14th St.
HUTT, JAMES BROOKE U. S. Naval Academy	Va.	1476 Newton St.
*JACOBSEN, GROVER CLEVELAND A. B., Iowa University	Ia.	1833 S St.
JAVIER, EMILIO CONZ	P. I.	106 Eye St.
JOHNSON, HERBERT CARL	Minn.	1100 Vermont Avenue
JOHNSON, WILLIAM MONROE	Md.	1843 Calvert St.
KEEFER, ARTHUR CHARLES	Md.	College Park, Md.
*KELLY, EDWARD, JR.	Mass.	79 R St. N. W.
LACY, SAMUEL WINSTON	Va.	P. O. Box 675, 11th St. Sta.
LAFLUR, JOHN RALPH B. S., 1915, Colby College	Me.	1321 Rhode Island Avenue
LAMB, ALBERT THOMAS	Kans.	1225 L St. N. W.
LANE, MUNSON HARMON B. S., 1918, Princeton University	Va.	R. 249, Patent Office
LEBRUN, ISABELLE SCHIER	Minn.	1854 Ontario Place N. W.
LEHMAN, ROLAND JULIUS George Washington University	Ill.	1404 Harvard St.
LEWIS, EDWARD DENCH B. S., 1918, Syracuse University	N. Y.	1925 K St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
LIVINGSTON, WALTER KCKENZIE University of South Dakota	S. D.	1343 Harvard St.
LYON, WILLIAM CAMPBELL Carnegie Institution of Technology	Pa.	2511 14th St. N. W.
MARSHALL, EDITH L.	Ill.	Apt. 3, 1926 M St. N. W.
†MATHER, THOMAS METLER State University of Iowa	S. D.	1430 Rhode Island Avenue
MATHIAS, FLOYD BRANSON	W. Va.	Mt. Rainier, Md.
†MCLEAN, CYRIL WESLEY A. B., University of California	Cal.	Department of Justice
MCCOY, WHITLEY PETERSON A. B., 1916, Dartmouth College	W. Va.	3421 34th St. N. W.
MCDERMOTT, FRANKLIN PIERCE, JR. A. B., 1902, A. M., 1903, E. E., 1905, Princeton University	N. J.	1814 Park Rd. N. W.
MCGUIRE, OLLIE ROSCOE A. B., 1917, Louisiana State University	La.	Cherrydale, Va.
MICHELSON, BERNARDETTE SERENA	Md.	908 Webster St. N. W.
MILLER, JESSE CLINTON	N. D.	203 9th St. S. W.
MORFORD, JAMES RICHARD	Del.	21 Eye St. N. E.
*MORSE, RALPH LYTER	D. C.	3426 16th St. N. W.
MOTLOW, GEORGE THOMPSON	Tenn.	909 13th St. N. W.
O'BRIEN, JAMES JOHN	N. Y.	Gladstone Apartment
O'LEARY, JOHN FRANCIS	Wis.	702 19th St. N. W.
OLIVER, FRED NASH University of Texas	Tex.	Walter Reed Hospital
PADEN, JACK	Okla.	1810 Calvert St. N. W.
PARK, FRANCES E. Ph. B., 1910, Syracuse University	N. Y.	1812 Ontario Place N. W.
PARSONS, MAUD ANNA	Ill.	102 L-M Building, Govt. Hotel
PEARLOVE, EDWARD JOSEPH	Minn.	1926 17th St. N. W.
PHILLIPS, JOHN BARTON George Washington University	Va.	216 S. Fairfax St. Alexandria, Va.
PIERCE, CLIFFORD DAVIS George Washington University	Tenn.	2511 14th St. N. W.
PIXLEY, REX ARTHUR	Mich.	Y. M. C. A.
POOL, HARRY R. University of Minnesota	Minn.	1 Dupont Circle
PORGES, MORTIMER	Ill.	1447 R St. N. W.
RAPPAPORT, HARRY George Washington University	N. Y.	1926 New Hampshire Avenue
REYNOLDS, MARVIN JACOB C. E., 1917, Rensselaer Polytechnic Institute	N. Y.	1842 Calvert St.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
RIDER, WAKEMAN A. B., 1904, Colgate University	N. Y.	Commercial National Bank Bldg.
RIGGLES, JOSEPH RICHARD, JR. George Washington University	D. C.	1328 Fairmont St.
RING, FRED A George Washington University	D. C.	1215 Harvard St.
ROBERTS, SAMUEL JUDSON	D. C.	1805 Kenyon St.
ROBERTSON, RICHARD A. B., St. Olaf College	Wis.	1314 Mass. Avenue
ROGERS, VICTOR JENKINS	Kans.	150 O St. N. E.
ROSENLUND, ARTHUR JHALMER	Minn.	1810 Calvert St.
*RUST, HARRY LEE, JR. Lehigh University	D. C.	912 15th St. N. W.
SAULSBURY, WILLIAM A. B., 1887, Harvard University	Del.	Somerset House, 16th and S Sts.
SHEPPARD, NORMAN BISHOP A. B., Yale University	Conn.	Apt. 51, The New Berne
SIMPICH, BRIGGS GEORGE University of Washington	Wash.	1422 Massachusetts Avenue N. W.
SOKOLOV, HARRY ELIOT	D. C.	32 Q St. N. W.
SPANTER, DAVID HOWARD University of Minnesota	Minn.	1447 R St. N. W.
STAYTON, WILLIAM HENRY, JR. Harvard University	N. Y.	Hotel Portland
STECHER, KARL A. B., 1918, George Washington University	Kans.	1736 G St. N. W.
STERLING, RALPH J.	Ohio	1739 P St.
STONE, HENRY ULEN	Mo.	1311 24th St. N. W.
†SUCHER, RALPH GUNN Bradley Polytechnic Institute	Ill.	3320 16th St. N. W.
TABLER, OTIS FRANCIS Richmond College	Va.	1100 Fairmont Avenue
TAGGART, ETTA LOUISE	D. C.	1758 Park Rd.
THOMAS, ROBERT A. B., 1915, Richmond College	Va.	Braddock Heights, Alexandria, Va.
†TIERNEY, JAMES PAUL West Virginia University	W. Va.	1208 M St. N. W.
*TOBIAS, BENJAMIN	Md.	1228 Massachusetts Avenue
UEHREN, ROBERT MONAT	Wis.	1343 Harvard St.
UNDERWOOD, EUGENE, JR. A. B., 1919, George Washington University	D. C.	707 20th St. N. W.
WATKINS, JOHN DAVID	Miss.	217 Senate Office Building
WEGENER, EMMA ALMA	Wis.	1344 Meridian St. N. W.
WILLIAMS, VIRGINIUS FAISON A. B., 1917, University of North Carolina	N. C.	1420 Rhode Island Avenue

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
WILLIAMSON, ERNEST R.	Ore.	1723 G St. N. W.
WILLIS, WARREN JENNISON	Minn.	U. S. Patent Office
Graduate, 1912, U.S. Naval Academy; A. B., 1918, George Washington University		
WILSON, JOHN JOHNSTON	Md.	1320 Farragut St. N. W.
WOODSON, FRED LEE	Mo.	1759 Columbia Rd.
WRIGHT, HAROLD PAGE	R. I.	Clerk's Document Room, House Office Building
WUNDERLICH, LUCILE MARIE	Ky.	228 2d St. N. E.
YOUNG, LESLIE BERNARD	N. Y.	1810 Calvert St.
A. B., 1913, Cornell University		
†ZILLMAN, BEN VICTOR	Mo.	U. S. Patent Office
B. S. in M. E., 1916, Washington University		

THIRD YEAR CLASS

ALBERTSWORTH, EDWIN FRANKLIN	Md.	130 Carroll Avenue, Takoma Park, Md.
A. B., 1915, A. M., 1916, Ph. D., 1918, George Washington University		
ALVORD, ELLSWORTH CHAPMAN	Wis.	1315 Shepherd St. N. W.
A. B., 1917, University of Wisconsin		
*BANK, ADOLF T.	Minn.	Supply & Accounts, Navy Dept.
University of North Dakota		
BARBOUR, HARRIET M.	Ore.	3213 13th St. N. W.
George Washington University		
BARNHART, ALVIN JOHNSON	W. Va.	1541 8th St. N. W.
BELL, CHARLES ROWAN	Ky.	1021 11th St. N. W.
BLACK, OWEN	Okla.	1100 Vermont Avenue
BLOEM, JOHN HARRY	Mich.	Federal Trade Commission
BOYER, EUGENE FRANCIS	Conn.	1421 Eye St. N. W.
Ph. B., 1917, Yale University		
BRODY, ARTHUR CHESTER	N. Y.	General Land Office
BROWN, WALTER LEE	Ark.	1219 Shepherd St. N. W.
BRYANT, JOSEPH MORTIMER	Utah	1812 Park Rd.
BUSH, CLARENCE EDGAR	D. C.	1019 Washington Loan & Trust Building
CANFIELD, RAYMOND BISHOP	D. C.	
Ph. B., 1910, Yale University		
CARTER, FERDINAND ESPEY	Md.	Taylor St. Chevy Chase, Md.
CARTER, GEORGE HENRY	Iowa	1661 Hobart St.
Ph. B., 1898, State University of Iowa		
L. L. B., Feb. 1920, George Washington University		
CLARKE, CALVIN	Ky.	2702 12th St. N. E.
COLLINS, ELMER BRIGGS	Ala.	Interstate Commerce Commission

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
CONNELL, LETCHER BENJAMIN	Tenn.	
CORBIN, ELMER L.	Ill.	1011 Monroe St.
CORNELL, HERBERT WATSON	Colo.	5419 Illinois Ave.
A. B., 1908, University of Colorado		
CORPUS, ELIADORO		
PALACTO	P. I.	696 12th St. N. W.
University of the Philippines		
CURRY, JOSEPH CLIFFORD	Tenn.	Box 603, Y. M. C. A.
University of Chattanooga		
DOWELL, CASSIUS MCCLELLAN	Ill.	1738 Lanier Place
EDDY, GRACE MARIE	Wis.	1424 R St. N. W.
George Washington University		
*EDWARDS, BASIL DUKE	Ky.	R. 303, S. W. & N. Bldg.
U. S. Military Academy		
*FRAVEL, ROBERT HIRAM	Va.	1615 Swamp St. N. W.
A. M., 1906, Randolph-Macon College		
FRAY, JOHN AARON	Cal.	Wardman Park Hotel
A. B., 1909, Missouri Valley College		
L. L. B., Oct. 1919, George Washington University		
FREY, CHARLES MILLARD	Neb.	Y. M. C. A.
A. B., University of Nebraska		
FRIEDLAND, KARL BENJAMIN	Utah	
FULLER, C. T. HURTON	Iowa	4317 Iowa Ave. N. W.
A. B., 1915, Central University of Iowa		
FULLER, WILEY MADISON	Tex.	49 T St. N. W.
University of Texas		
FURLOW, ALLEN JOHN	Minn.	1821 Jefferson Place
GOLDBERG, HARRY SAMUEL	Conn.	459 M St. N. W.
GRAVES, JOHN TEMPLE, JR.	D. C.	University Club
Litt. B., 1915, Princeton University		
GREGG, LEWIS JUDSON	Mich.	26 14th St. N. E.
HAMMOND, JAMES MORRIS	Nev.	1219 Eye St.
Stanford University;		
University of California		
HECKMAN, WILLIAM JACOB	Iowa	1339 Vermont Avenue N. W.
HENRY, CONDON CAYWOOD	Tenn.	907 L St. N. E.
A. B., 1915, George Washington University		
*HOLMAN, JAMES BRADLEY	D. C.	1223 K St. N. W.
HOLMGREN, SAMUEL THEODORE	N. H.	R. 605, Y. M. C. A.
HEED, CATO RYNDGE	Ind.	1101 Euclid St. N. W.
JACOBSON, EDWARD ANTON	Minn.	Y. M. C. A.
A. B., 1915, Gustavus Adolphus College		
JAMES, MAXWELL	N. Y.	1020 Fairmont St.
B. S., 1913, College of the City of New York		

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*JOHNS, HYLAND RICHTER B. S. in E. E., 1913, University of Pennsylvania	Pa.	1450 Harvard St.
*KENNEDY, JAMES ARTHUR Richmond College	S. C.	300 Southern Building
KILMARTIN, ROBERT CHARLES, JR.	D. C.	1489 Newton St.
KIMBEL, JOSEPH WISLEY	Pa.	721 Taylor St. N. W.
LANDREIS, NORMAN LINCOLN A. B., Lehigh College, Hopkinton, Iowa	Iowa	Northbrook Courts, 16th and Newton Sts.
LAVERY, THOMAS CLAFFEY Valparaiso University	Mo.	1906 N St. N. W.
LEHNER, OTTO PHILIP	Wis.	917 18th St.
LEHR, MILTON ANTHONY	Ohio	5617 Colorado Avenue
LEVINSON, CHARLES WILLIAM A. B., 1915, Johns Hopkins University	Md.	623 M St.
LOGGINS, JAMES ELWYN	Tenn.	
MANNING, ELLIS WOOSTER	Okl.	1826 17th St.
MANNING, LUCY RAYNS	Okl.	1826 17th St.
MARBUS, ANDREW A. B., University of Idaho	Idaho	508 19th St.
*MAYERS, LEWIS Ph. D., 1914, Columbia University; A. B., 1910, College of City of New York; A. M., 1912, University of Wisconsin	N. Y.	818 Connecticut Avenue
MESEKE, FRANK BENNETT Ph. B., 1912, University of Chicago	Ind.	729 North Capitol St.
*MILLER, HENRY	Ky.	Federal Trade Commission
MORGAN, LINTON	Ark.	2106 F St. N. W.
*MOZINGO, HARLEY L.	Colo.	1739 P St. N. W.
MURPHY, ROBERT DANIEL Marquette University	Wis.	1344 Vermont Avenue N. W.
MURRELL, HUGH LOFTUS	Tenn.	1725 17th St. N. W.
NELSON, LEROY WALTER	Nebr.	530 20th St. N. W.
NOBLE, LEW MATRICK A. B., 1916, Bowdoin College	Me.	1422 Massachusetts Avenue
O'BRIEN, PATRICK LAMBERT	Idaho	1100 Vermont Avenue
PABST, BERTHA ELIZABETH Adelphi College	N. Y.	4622 15th St. N. W.
PALTRIDGE, GEORGE HENRY A. B., 1918, George Washington University L. L. B., Feb. 1920, George Washington University	D. C.	1222 O St. N. W.
PAIRS, ISRAEL S. B., 1914, Massachusetts Institute of Technology	Mass.	U. S. Patent Office
PATRICK, JOHN HEZEL A. B. & B. S. in Ed., 1912, University of Missouri	Mo.	1323 10th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
PETER, ROBERT George Washington University	Md.	Rockville, Md.
PORTER, HERBERT HENDERSON Massachusetts Institute of Technology	Va.	Clarendon, Va.
RANDALL, CARLTON MORRELL	Pa.	Y. M. C. A.
RAYMOND, MARY JANE	D. C.	1224 Euclid St. N. W.
REGES, MAXIMILIAN F. George Washington University	N. J.	R. 308, Patent Office
RICHARDSON, HENRY JEFFERSON	Ark.	1427 Chapin St.
RYAN, MARK JOSEPH	N. Y.	1431 L St. N. W.
SCHWERTNER, FRITZ	D. C.	326 C St. S. W.
†SHALLNA, ANTHONY OSWALD A. B., Cornell University	Pa.	Department of Justice
SHAPPIRO, SOLOMON B. Ch., 1915, University of Michigan	D. C.	U. S. Patent Office
SHEA, JAMES PATRICK A. B., 1915, Georgetown College	D. C.	1161 Neal St. N. E.
*SHORB, PAUL EDGAR A. B., 1917, University of North Dakota	N. D.	Y. M. C. A.
STAFFORD, HAROLD EMERSON	Wis.	Treasury Department
STANLEY, ABE WALLINGFORD University of Missouri	Mo.	Y. M. C. A.
STEELE, FRANCIS WILLARD University of West Virginia	W. Va.	Bureau of War Risk In- surance
STRONG, GEORGE EUGENE Ph. B., 1917, University of Chicago; A. B., 1919, University of Kansas	Kans.	R. 189, House Office Building
*TOMLINSON, JOHN PRIDE A. B., 1914, University of the South	Tenn.	205 Wardman Courts, West
TOWNSEND, JOHN WILLIAM Southwestern Presbyterian University	Fla.	1829 19th St. N. W.
TURP, JAMES SOWDEN	N. J.	608 22d St. N. W.
VAN METER, ARTHUR A. B., 1913, Ohio State University	Ohio	5210 Illinois Avenue N. W.
VAN MOSS, BERT	Okla.	2406 14th St. N. W.
WATERS, DANIEL JAMES	D. C.	1800 K St. N. W.
WRIGHT, LEWIS A. Lehigh University	D. C.	517 Cedar St. Takoma Park, D. C.

CANDIDATES FOR DEGREE OF MASTER OF LAWS

ALEXANDER, WALTER RICHARDSON LL. B., 1917, George Washington University	Mo.	1313 R. I. Avenue N. W.
--	-----	-------------------------

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
BIRMINGHAM, JOHN THOMAS LL. B., 1918, George Washington University	Conn.	1100 Vermont Avenue
BREMER, EDWARD GEORGE LL. B., 1919, George Washington University	Minn.	
*BROOKS, GERALD W. LL. B., 1916, University of Buffalo	N. Y.	309 B St. N. E.
†BURROWS, TREMAINE KELLOGG A. B., 1897, University of Nebraska; L. L. B., 1917, George Washington University	N. Y.	6902 15th St. Takoma Park, D. C.
CARTER, GEORGE HENRY Ph. B., 1898, State University of Iowa; L. L. B., Feb. 1920, George Washington University	Iowa	1661 Hobart St.
*DENIT, LOUIS MALVERN LL. B., 1918, George Washington University	D. C.	204 10th St. N. E.
FAST, ARTHUR HERMAN A. B., 1909, Baker University; LL. B., 1912, University of Kansas	Kans.	1229 12th St.
†FLICKINGER, SAMUEL JOHN LL. B., 1918, George Washington University	N. J.	2511 14th St. N. W.
FOOKS, HERBERT CLARENCE A. B., 1906, St. Johns College; LL. B., 1916, University of Idaho	D. C.	2006 R St.
*HARDEN, FRED GEER A. B., 1907, A. M., 1908, University of Nebraska; LL. B., 1919, George Washington University	Nebr.	1468 Harvard St. N. W.
MILLER, CLARENCE ALTHA LL. B., 1919, George Washington University	Pa.	Apt. 3, The Hirmhurst
MILLER, HENRY LL. B., Feb., 1920, George Washington University	Ky.	Federal Trade Commission
†MORROW, HENRY BASCOM, JR. LL. B., 1917, George Washington University	Tenn.	2511 14th St.
PALTRIDGE, GEORGE HENRY A. B., 1918, George Washington University; LL. B., Feb., 1920, George Washington University	D. C.	1222 O St. N. W.
†PARMELEE, WILLIAM HORACE LL. B., 1918, George Washington University	Pa.	2511 14th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*ST. CLAIR, ALBERT THURSTON A. B., 1917, George Washington University; LL. B., 1919, George Washington University	D. C.	1401 Columbia Rd.
SHORB, PAUL EDGAR A. B., 1917, University of North Dakota, LL. B., Feb., 1920, George Washington University	D. C.	Y. M. C. A.
SMITH, FRANK BROWN LL. B., 1914, George Washington University	Md.	911 Massachusetts Avenue
*STONE, CLIFFORD FONTAINE LL. B., Feb., 1919, George Washington University	Wis.	1828 G St. N. W.
STOVALL, BATES MITCHELL LL. B., 1917, George Washington University	D. C.	The Cecil Apartment
*STUKES, TAYLOR HUDNALL A. B., 1915, Washington and Lee University; LL. B., 1919, George Washington University	S. C.	221 East Capitol St.
VELOSO, JUAN AVILA LL. B., 1919, University of Florida	P. I.	Central Y. M. C. A.
*WEDVIG, PETER University of California; LL. B., Hastings College of Law	D. C.	2006 F St. N. W.
WILLKIE, ROBERT TRISCH A. B., 1909; LL. B., 1911, Indiana University	Ind	2129 G St. N. W.
†WOOD, RICHARD FRANCIS C. E., 1915, Lehigh University; LL. B., 1919, George Washington University	D. C.	3301 Highland Place

SPECIAL STUDENTS

†ADAMS, FRANKLIN LAUNCELOT A. B., 1900, Boston University; A. M., 1908, Dartmouth College	P. R.	1214 Michigan Avenue N. E.
*ALLEN, CHARLES RISDON	D. C.	1912 1st St. N. W.
*BANNON, PAULINE	Md.	Shoreham Hotel
BLED SOE, HARRISON WARREN	Kans.	1100 Vermont Avenue
BLEHR, FRANCIS MORRIS	Minn.	1121 Eye St.
BOYSEN, ALFRED	D. C.	Federal Reserve Board
BREEN, EMMA B.	Tex.	The Burlington Hotel
*BROCKWELL, JOSEPH MATILE	D. C.	1259 Morse St. N. E.
BROWN, HERBERT HAROLD Oxford University	Mass.	234 M St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*BRUNER, WILBUR KICE	D. C.	1216 D St. S. E.
CALLISTER, NORVAL EDDINGTON	Utah	3151 Mt. Pleasant St. N. W.
CASEY, ANDREW HARRISON	N. C.	100 N. C. Avenue S. E.
*CHISHOLM, THEODORE LIVINGS B. E., Johns Hopkins Univer- sity	Md.	105 Patent Office
*CLAVALAUX, IRENE CATHERINE	D. C.	2000 North Capitol St.
COLLINS, SPENCER	Utah	Apt. 42, The Monticello
*COLLINS, WILLIAM STUART	Ga.	1500 20th St. N. W.
†COOK, EMERSON COLLINS	D. C.	2006 N St. N. W.
CRATER, WILLIAM PARKE	N. C.	227 East Capitol St.
†CUNNINGHAM, RAY JESSE	Utah	2523 13th St. N. W.
DEBRODES, GEORGE VICTOR	D. C.	The Portner
DUFFY, MAURICE MATTHEW	Wash.	200 4th St. S. E.
DUNLEAVY, MARGARET MARIE	N. Y.	A-B Bldg., Govt. Hotels
*DWYER, WILLIAM HENRY	Me.	20 Cedar Avenue, Takoma Park, Md.
*ECKERT, CHARLES	D. C.	1030 Kenyon St.
EGAN, HILDRED	Wis.	Zone Finance Office
*FLING, RICHARD HENRY	Va.	Clarks Gaq, Va.
*FOGARTY, FRANCIS XAVIER	D. C.	918 Va. Avenue S. W.
FOOKS, HERBERT CLARENCE A. B., 1906, St. Johns College; LL. B., 1916, University of Idaho	D. C.	2006 R Street
*FREDO, MICHAEL A.	N. Y.	504 F St. N. E.
GRAFF, ISADORE	Wis.	904 Westminster St.
GRYCE, SELMA STEINFORT A. B., University of Wisconsin	N. D.	132 3d St. S. E.
HANSEN, JOSEPH BENJAMIN	Ill.	3618 10th St.
*HANSON, HANS	Wis.	1445 Fairmont St.
†HARRIS, FLETCHER WOOLTEN	Ga.	115 C St. S. E.
HARRIS, LESTER ABRAHAM A. B., 1911, Bucknell College	Pa.	2609 Munsey Building
*HAVELOCK, FRANCIS JAMES	Minn.	Naval Medical School
*HEIST, LUTHER H.	Pa.	1739 P St.
HICKS, HENRY CHESTON A. B., 1914, Dickinson College	Pa.	1736 G St. N. W.
*HIGHTOWER, DAN	Tex.	Department of Justice
†HILL, RICHARD HARRISON A. B., 1905, Princeton University; LL. B., 1912, Harvard Law School	Ky.	1619 H St. N. W.
HOFSTEAD, JOHN ANDREW	N. D.	2413 M St.
*HOLWEGNER, FRED	N. D.	1707 North Capitol St.
†HUDGENS, ROBERT WATTS B. S., 1915, The Military College of South Carolina	S. C.	Bradford Apartments
†JAMES, JOSEPH PIERSON LL. B., 1916, George Washington University	Cal.	1907 15th St. N. W.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
*KALDENBACH, ARTHUR WILLIAM	D. C.	
†KAY, HAROLD THOMAS	Utah	128 B St. N. E.
†KELLY, JOHN EDWARD	D. C.	115 New York Avenue N. W.
KIMBREL, MADGE	Ind.	1338 R St.
*KITITCH, ZIVOYIN TODOROVICH	Serbia	1322 L St.
*KLEIN, SAM	Ala.	1022 9th St.
KLIMA, STANLEY V.	D. C.	1826 Kilbourne Place
LAKE, RUSSELL BRACKETT	Mass.	1842 Calvert St.
LETHEM, RAYMOND RENE	D. C.	1800 Eye St.
LINDNER, EDWARD THOMAS	Alaska	4428 Kansas Avenue
*LOVE, OLIVE DURGIN	D. C.	3748 McKinley St. Chevy Chase, D. C.
LOVELESS, WARD	Ala.	1403 15th St.
MARCINSKI, FRANK	D. C.	4444 Alton Place, Tenleytown, D. C.
†MASSEY, JERRY C. LL. B., LL. M., N. P. L., Georgetown University	D. C.	201 E St. S. E.
McKEE, HUDSON	D. C.	1420 21st St.
McLAUGHLIN, ANNA GERTRUDE	Wyo.	601½ 4th St.
†MICOU, CRESWELL MACMURRAY	D. C.	2400 16th St. N. W.
*MILLER, CHARLES S. A. B., LL. B., Louisiana State University	La.	The Toronto
*MILLER, CLYDE PAYNE	Mo.	914 Cairo Apartment
MONTY, WILLIS ELLSWORTH LL. B., 1916, George Washington University	Vt.	707 22nd St.
†MOORE, JAMES BALLARD LL. B., 1913, George Washington University	D. C.	601 Washington Loan & Trust Bldg.
*O'BRIEN, CLARENCE ABBOTT LL. B., M. P. L., Georgetown Law School	D. C.	1016 11th St.
†PAUL, ALBERT HARDING University of Utah	Utah	Y. M. C. A.
*RADINOFF, VASILE V.	N. J.	3312 4th St. S. E.
REANTY, JAMES A.		1923 K St.
†ROMNEY, VERNON	Utah	100 4th St. S. E.
*ROWE, LILY LYKES	D. C.	514 Woodward Building
SABURI, SADAQ	D. C.	Japanese Embassy
*SHAW, CHARLES OWEN LL. B., Georgetown University	D. C.	The Wellington
SHELTON, WILLIAM ARTHUR A. B., 1908, University of Georgia; A. M., 1912, University of Chicago	D. C.	2311 Tennyson St. Chevy Chase, D. C.
SIMPSON, WILLIS EARL Ph. B., LL. B., Ohio Northern University	Mont.	1759 Euclid St.
SMITH, HAROLD C. George Washington University University of Texas	Tex.	Box 127, Rockville, Md.

<i>Name</i>	<i>Legal Residence</i>	<i>Address</i>
†SOMMERS, WALTER ALLWOOD LL. B., 1905, St. Lawrence University; LL. B., 1906, George Washington University	N. Y.	754 Rock Creek Church Rd.
STEPHENS, EDGAR BASCOM	Ky.	3107 Mt. Pleasant St.
STERN, WILLIAM FRED	Ill.	1735 Willard St.
*STEWART, EDWIN HOMER	Ore.	2028 F St. N. W.
*TEFFT, IVAN DOUGLAS	Ill.	1332 V St. N. W.
THOMAS, LISLE A. B., 1917, George Washington University	Mich.	1420 R St. N. W.
THOMAS, WILLIAM L.	D. C.	1216 D St. S. E.
†TRAMMELL, CHARLES MONROE Ph. B., 1907, Emory College; LL. B., 1909, Vanderbilt Law School	Fla.	819 G St. N. W.
VESTAL, RUFUS MORTON LL. B., LL. M., Hamilton College of Law	D. C.	309 Shepherd St. N. W.
*WHEELER, JOHN ROWE	Idaho	Apt. 31, The Home
†WOMERSLEY, CHARLES EDWIN	Colo.	4122 8th St. N. W.
WYATT, ZOE M. S.	Ind.	509 11th St. N. W.
YAECKER, WALTER ERNEST	D. C.	2371 Champlain St.
*ZEMPEL, EDWARD HARTMAN	S. D.	712 20th St. N. W.

SUMMARY

Candidates for Degree of Bachelor of Laws:	
First Year.....	426
Second Year.....	121
Third Year.....	94
Total.....	641
Candidates for Degree of Master of Laws.....	26
Total.....	667
Counted Twice.....	4
Total Candidates for degrees.....	663
Special Students.....	20
Total.....	753
Counted Twice.....	1
Total All Students.....	752
Candidates for degrees who are college graduates.....	147
Percentage.....	22.2
Candidates for degrees who have had all or part of a college course.....	341
Percentage.....	51.4

COLLEGE GRADUATES CANDIDATES FOR DEGREES

Albion College.....	1	Middlebury College.....	2
Albright College.....	1	Military College of	
Arkansas, University of.....	2	South Carolina.....	1
Baker University.....	1	Mississippi College.....	1
Bowdoin College.....	1	Missouri, University of.....	3
Brown University.....	2	Missouri Valley College.....	1
Bucknell College.....	1	Monmouth College.....	1
California, University of.....	1	Nebraska, University of.....	4
Carnegie Institute of		Nevada, University of.....	1
Technology.....	1	North Carolina, University of..	1
Central University of Iowa.....	1	North Dakota, University of..	2
Center College of Kentucky....	1	Ohio State University.....	2
Chattanooga, University of....	1	Pennsylvania, University of....	5
Chicago, University of.....	3	Pittsburgh University.....	1
Cincinnati, University of.....	1	Princeton University.....	5
Colby College.....	2	Randolph-Macon College.....	2
Colgate University.....	1	Rensselaer Polytechnic	
College of the City of New		Institute.....	2
York.....	3	Rice Institute.....	1
Colorado Agricultural College..	1	Richmond College.....	1
Colorado, University of.....	2	St. John's College,	
Columbia University.....	3	Annapolis, Md.....	1
Cornell University.....	2	St. Olaf College.....	1
Dartmouth College.....	4	Swarthmore College.....	1
Davidson College.....	1	Syracuse University.....	3
Delaware College.....	1	Thayer School of Civil	
Denver, University of.....	2	Engineering.....	1
Drury College.....	1	Transylvania College.....	1
Earlham College.....	2	U. S. Military Academy.....	2
Florida, University of.....	1	U. S. Naval Academy.....	4
Georgetown College.....	1	University of the South.....	2
George Washington University	11	Utah, University of.....	1
Goucher College.....	2	Union University.....	1
Gustavus Adolphus College....	1	Vermont, University of.....	1
Harvard University.....	2	Virginia, University of.....	1
Hiram College.....	1	Wake Forest College.....	1
Idaho, University of.....	1	Washington and Lee	
Illinois, University of.....	2	University.....	1
Indiana University.....	2	Washington University.....	1
Iowa, State University of.....	4	Wellesley College.....	1
Johns Hopkins University.....	1	Western Maryland College....	1
Kansas, University of.....	1	Westminster College.....	1
Lehigh University.....	1	West Virginia University.....	1
Lenox College,		Wisconsin, University of.....	4
Hopkinton, Iowa.....	1	Yale University.....	3
Louisiana State University....	1		
Manhattan College.....	1		156
Massachusetts Institute of		Counted Twice.....	9
Technology.....	3		
Miami University.....	1		147
Michigan, University of.....	5		

GEOGRAPHICAL DISTRIBUTION

Alabama.....	42	Pennsylvania.....	169
Arizona.....	4	Rhode Island.....	14
Arkansas.....	10	South Carolina.....	13
California.....	29	South Dakota.....	23
Colorado.....	21	Tennessee.....	59
Connecticut.....	43	Texas.....	67
Delaware.....	9	Utah.....	38
Florida.....	23	Vermont.....	16
Georgia.....	33	Virginia.....	184
Idaho.....	13	Washington.....	18
Illinois.....	137	West Virginia.....	42
Indiana.....	94	Wisconsin.....	54
Iowa.....	68	Wyoming.....	6
Kansas.....	46	Alaska.....	1
Kentucky.....	48	District of Columbia.....	1438
Louisiana.....	18	England.....	1
Maine.....	24	Hawaii.....	1
Maryland.....	174	Philippines.....	14
Massachusetts.....	81	Porto Rico.....	8
Michigan.....	62	Canada.....	3
Minnesota.....	66	Central America.....	1
Mississippi.....	37	China.....	9
Missouri.....	70	Costo Rico.....	1
Montana.....	10	Egypt.....	1
Nebraska.....	28	Germany.....	2
Nevada.....	3	Greece.....	2
New Hampshire.....	9	Honduras.....	1
New Jersey.....	64	Japan.....	3
New Mexico.....	4	Paraguay.....	1
New York.....	178	Persia.....	2
North Carolina.....	46	Peru.....	1
North Dakota.....	37	Russia.....	2
Ohio.....	98	Serbia.....	2
Oklahoma.....	42		
Oregon.....	13	Total.....	3882

GENERAL SUMMARY

Teaching Staff

In many instances members of the Teaching Staff only give part time to the University:

Professors.....	84
Associate Professors.....	8
Associates.....	11
Assistant Professors.....	21
Lecturers and Instructors.....	76
Assistants and Demonstrators.....	49
	249

STUDENTS REGISTERED IN THE UNIVERSITY DURING 1919-20 Department of Arts and Sciences

School of Graduate Studies.....	205
Columbian College.....	1890
College of Engineering.....	530
Teachers College.....	335
	2960

Professional Schools

Medical School.....	117
Dental School.....	74
College of Pharmacy.....	9
Law School.....	752
	952
Total.....	3912
Duplicates.....	30
	3882

Summer School, 1919

Summer School, Arts and Sciences.....	461
Summer School, Law.....	209
	668

DEGREES CONFERRED AT COMMENCEMENT, 1919

HONORARY DEGREES

Doctor of Music

NICHOLAS DOUTY

Doctor of Science

JOHN HAYS HAMMOND, JR.

Doctor of Letters

LANGDON ELWYN MITCHELL

ELIZA RUHAMAH SCIDMORE

Doctor of Laws

JOHN BARTON PAYNE

HOWARD SUTHERLAND

LEONARD WOOD

IN COURSE

Bachelor of Arts

LOUISE FRANKLIN BACHE.....	District of Columbia
RACHEL LUCILE BENFER.....	District of Columbia
RUTH HILTON BENNETT.....	District of Columbia
DOLLY MARTHENA CALLAHAN.....	Virginia
MILDRED RUBERTA CALLAHAN.....	Virginia
LINA WRIGHT CARNAHAN.....	Missouri
PERCY THOMAS COWLES (With distinction).....	Massachusetts
ERNEST EDGAR DEITZ.....	West Virginia
DOROTHY DONAHUE.....	Vermont
RILLA MAY HAUKE.....	District of Columbia
ELIZABETH ROEDER HEITMULLER.....	District of Columbia
(With distinction)	
FRANK LANGELLOTTI.....	New York
CATHARINE REGIS MORAN.....	District of Columbia
THOMAS TAYLOR MACEWEN.....	District of Columbia
FLORENCE EBERLY MENTZER.....	Pennsylvania
HENRY RAVENEL.....	District of Columbia
FRANCIS CORE REYNOLDS.....	District of Columbia
LEWIS ROCKOW (With distinction).....	Wisconsin
INEZ BUFFINGTON RYAN (With distinction).....	District of Columbia
REBEKAH SANBORN.....	District of Columbia
HENRY CLAY STEPHENS, JR.....	Tennessee
MARIA MORSE STROUT.....	Maine
RALPH AARON STYER.....	Pennsylvania
TSU-LIEH SUN.....	China
EUGENE UNDERWOOD.....	Illinois

EARLE WILBUR WALLICK.....	Illinois
FRANCIS EUGENE WALTER.....	Pennsylvania
ETHEL WOLF (With distinction).....	District of Columbia
WILLIAM MITCHELL (As of the Class of 1899).....	District of Columbia

Bachelor of Science in Medicine

JOHN HUGH LYONS.....	District of Columbia
----------------------	----------------------

Bachelor of Science in Civil Engineering

JACOB LEON LENOVITZ (With distinction).....	Maryland
---	----------

Bachelor of Science in Mechanical Engineering

GEORGE ALOYSIUS DEGNAN.....	Pennsylvania
ROYAL HAINES HEALD.....	District of Columbia
JOSEPH HENRY WILSON.....	Pennsylvania

Bachelor of Science in Chemistry

LAWRENCE ELMER BURTON.....	Indiana
SIMON GERBER.....	District of Columbia

Bachelor of Arts and Bachelor's Diploma in Education

SADIE WHITE BELLER.....	District of Columbia
PEARL LEE BOONE.....	Maryland
ROSE BRILL.....	District of Columbia
FRANCES MOON BUTTS.....	Virginia
LINO JUAN CASTILLEJO.....	Phillippine Islands
MARY CATHERINE DENT.....	District of Columbia
MARY ANNETTE EMORY (With distinction).....	District of Columbia
KATE MARIA GIBBS.....	Massachusetts
LAURA PYWELL HESTER.....	District of Columbia
NANNETTE ISABEL HOCHSEISEN.....	District of Columbia
LASALIA McCAFFREY.....	Iowa
MARIE CUTHBERTSON NOLD.....	District of Columbia
FRANCES LOUISE PARK.....	Michigan
MARGARET JOANNA PRENTISS (With distinction).....	District of Columbia
THOMAS RICHARD REES.....	Utah
CHARLES L. STONE.....	District of Columbia
JEANNETTE BLANEY STRAYER.....	New York
RAYMOND EVERETT TERRY.....	New York
HEBER HERBERT VOTAW.....	Ohio
GRACE VIOLA WRIGHT.....	District of Columbia

Master's Diploma in Education

ALEXANDER MATHIAS BELLONY.....	New York
--------------------------------	----------

Doctor of Medicine

CHARLES JAMES BARONE.....	Michigan
GEORGE OVERTON BASSETT.....	District of Columbia

ELLIOTT MUSE CAMPBELL (With distinction).....	District of Columbia
WILLIAM CLIFFORD GARDNER (With distinction)....	Pennsylvania
ROBERT ROY HOTTEL.....	Maryland
JOSEPH KREISELMAN.....	Ohio
HENRY WINSHIP LEETCH (With distinction).....	District of Columbia
ALEX ROBERT ODEN.....	District of Columbia
HYMAN DAVID SHAPIRO.....	District of Columbia
JAMES ALEXANDER SMART.....	Virginia
NATHAN NORMAN SMILER (With distinction).....	District of Columbia

Nurses Certificates

WILLIE GRANT ASHBY.....	Virginia
SARAH ELIZABETH BROWN.....	District of Columbia
RUTH EDWARD CREWS.....	North Carolina
MARY JANE FLAHERTY.....	Virginia
ELIZABETH McELMURRAY FULCHER.....	Georgia
LENA MOORE GRAVES.....	Virginia
NELL HAMLIN.....	North Carolina
LAURA HAYDEN.....	Maryland
VIRGINIA KIRBY.....	Virginia
GRACE LAKE.....	Virginia
LOUVA LEE NEFF.....	Virginia
MARION BOVEE OLDS.....	Virginia
LURLINE VERNON PALMORE.....	Virginia
LOLA PRATT.....	Virginia
BESSIE JEFFREY WALKER.....	Virginia
ELSIE WATSON.....	North Carolina
GRACE LEONAINIE WELLS.....	Virginia

Doctor of Dental Surgery

DEWITT TALMADGE BAKER.....	Texas
WALTER CUTHBERT CHEELY.....	Colorado
EDWARD HAROLD DONOVAN.....	Massachusetts
JOHN WESLEY DULL.....	Pennsylvania
BERNHARD EDWIN ERIKSON (With distinction).....	Illinois
WILLIAM HOWARD GORTON.....	New York
LOUIS JOSEPH GENESSE.....	New York
ELLIOTT ALBERT HUNT.....	New Jersey
JACK SOL KAPLAN.....	New Jersey
SAMUEL KATZMAN (With distinction).....	New York
CLARENCE EDWARD KELLY (With distinction).....	Missouri
ROBERT WILLIAM McCULLOUGH.....	Maryland
JAMES FRANCIS MITCHELL.....	Rhode Island
RALPH LANCASTER MORRISON.....	Maryland
SHIGERU OZAWA.....	Japan
IVAN H. S. RICHMAN.....	Minnesota

GEORGE JULIAN SAFERSTEIN.....	New Jersey
CHARLES VALENTINE STIEFEL.....	District of Columbia
CHARLES LENTON THOMAS.....	Texas
JACQUES VEINTRAUB.....	New Jersey
CARL RANDALL WHELOCK.....	Ohio
EARL BENJAMIN WHITE (With distinction).....	District of Columbia
CHARLES RALPH WITT.....	Indiana

Bachelor of Laws

FRANK HARRIS BORDEN.....	Pennsylvania
EDWARD GEORGE BREMER.....	Minnesota
WILLIAM HERBERT EAMES.....	Massachusetts
JOHN WILLIAM EDWARDS.....	Vermont
ANDREW BROADDUS ESTES, JR.....	Georgia
ROBERT RAYMOND FAULKNER.....	Illinois
JOHN FLAM.....	New York
LEROY BLAKE FOSTER.....	Ohio
FRED GEER HARDEN.....	Nebraska
JOHN JAMES HUFF.....	Iowa
STUART JONES MACKAY.....	New York
CLARENCE ALTHA MILLER.....	Pennsylvania
HOWARD SEAMAN MILLER.....	California
BESSIE WOOTEN NEWSOM (With distinction).....	Arkansas
WILLIAM ALFRED READ.....	Massachusetts
WALLACE ANDREW ROBERTSON.....	Indiana
ALBERT THURSTON ST. CLAIR.....	District of Columbia
TAYLOR HUDNALL STUKES (With distinction).....	South Carolina
CHARLES PATRICK SWINDLER.....	Colorado
FRANK HATHAWAY TOWSLEY.....	New York
RICHARD FRANCIS WOOD.....	District of Columbia
YUNG-CHING YANG (With distinction).....	China

Master of Laws

LESTER LLEWELLYN SCHNARE.....	Georgia
ANITA WILSON VEALE.....	California

Master of Science

PETER HIDNERT.....	New York
A. B., February 1918, George Washington University.	

Master of Arts

KING CHU.....	China
A. B., February 1919, George Washington University.	
ROSALIE GARDINER JONES.....	New York
MARQUIS LAFAYETTE LENNON.....	Tennessee
A. B., 1912, Union University, Jackson, Tennessee.	
OLLIE ROSCOE MCGUIRE.....	Louisiana
A. B., 1917, Louisiana State University.	

KENKICHI MORI.....	Japan
EDWIN CLARENCE REED.....	District of Columbia
LL. B., Washington College of Law.	
EDWIN HENRY SHINN.....	Arkansas
B. A., 1910, Arkansas University.	
B. S., 1916, Oklahoma A. & M.	
WARREN JENNISON WILLIS.....	Minnesota
Graduate 1912, U. S. Naval Academy.	

Doctor of Philosophy

HARRY PERCY BARROWS.....	Oregon
B. S., 1911, Utah Agricultural College.	
M. S., 1917, George Washington University.	
FRANK COOPER CRAIGHEAD.....	Pennsylvania
B. S., 1912, Penn. State College.	
M. S., 1915, George Washington University.	
FRANK MCGINLEY PHILLIPS.....	Iowa
A. B., 1908, Iowa State Teachers College.	
A. M., 1915, Iowa State University.	

AT OCTOBER CONVOCATION, 1919

HONORARY

Doctor of Laws

WILLIAM A. DAY	MILES POINDEXTER
OTTO HERMAN KAHN	JOHN DU BOIS TELLER

IN COURSE

Bachelor of Science in Medicine

TOMAS CAJIGAS.....	Porto Rico
M. D., 1918, George Washington University.	

Bachelor of Arts

ALEXANDER MATTHIAS BELLONY

Master's Diploma in Education

MARQUIS LAFAYETTE LENNON.....	Tennessee
A. B., 1912, Union University.	
A. M., 1918, George Washington University.	

Bachelor of Laws

ARTHUR CHESTER BRODY.....	New York
LETCHER BENJAMIN CONNELL.....	Tennessee
HERBERT WATSON CORNELL.....	Colorado
A. B., 1908, University of Colorado.	
JOHN AARON FRAY.....	California
A. B., 1909, Missouri Valley College.	
KARL BENJAMIN FRIEDLAND.....	Utah

Master of Laws

EDWARD GEORGE BREMER Minnesota

Doctor of Medicine

THOMAS BENTON CRISP, JR. District of Columbia

Doctor of Dental Surgery

DAVID SCOTT AUSTIN New York
 NATHANIEL HAWTHORNE BROWNE New Jersey
 JULIA SYLVIA COGLIN Massachusetts
 FRANK LEONARD DAILEY Washington
 ROBERT EDWARD GREENE New York
 CHARLES INBENDER New York
 MARK JAILER New York
 BERNARD LINK New York
 BENJAMIN MOSKOWITZ New Jersey
 WILLIAM SIDNEY RHODES Virginia
 EMANUEL SCHANTZ New Jersey
 NOAH CLEVELAND SECHRIST Pennsylvania
 WALTER DANIEL SULLIVAN Mississippi

Master of Science

GEORGE WASHINGTON SALZER New York
 A. B., 1918, George Washington University.

Master of Arts

FRANK DEANE MOORE District of Columbia
 A. B., 1918, George Washington University.

Doctor of Philosophy

EDWARD ELMER SMITH District of Columbia
 B. S. in Ch. E., 1914, University of Idaho.
 M. S., 1916, George Washington University.

AT SPECIAL CONVOCATION, OCTOBER 30, 1919

Doctor of Laws

HIS MAJESTY, ALBERT, King of the Belgians

AT WINTER CONVOCATION, 1920

HONORARY

Doctor of Laws

WILLIAM MUSGRAVE CALDER HERBERT CLARK HOOVER
 FRANKLIN MACVEAGH

Doctor of Letters

VICENTE BLASCO IBAÑEZ

IN COURSE

Bachelor of Arts

WAGER SWAYNE BROWN.....	District of Columbia
LEWIS MAXWELL LIDE.....	District of Columbia
FRED NASH OLIVER.....	Texas

Bachelor of Science in Medicine

WILLIAM CLIFFORD GARDNER.....	Pennsylvania
M. D., 1919, George Washington University.	

Bachelor of Laws

GEORGE HENRY CARTER.....	Iowa
HIGHLAND RIGHTER JOHNS.....	Pennsylvania
HENRY MILLER.....	Kentucky
GEORGE HENRY PALTRIDGE.....	District of Columbia
PAUL EDGAR SHORB (With distinction).....	North Dakota
JOHN PRIDE TOMLINSON.....	Tennessee
JAMES ARTHUR KENNEDY.....	South Carolina

Master of Laws

LOUIS MALVERN DENIT.....	District of Columbia
LL. B., 1918, George Washington University.	
HERBERT CLARENCE FOOKS.....	District of Columbia
LL. B., 1916, University of Idaho.	

Master of Science

HSIAO WEI MIN.....	China
B. S., 1916, Peiyang Government University.	
LAURA WINFIELD STEEVER.....	District of Columbia
B. S., 1911, George Washington University.	

Master of Arts

OTTO CARL GSANTNER.....	District of Columbia
A. B., 1915, George Washington University.	
MARGARET HERTHA SCHOENFELD.....	District of Columbia
A. B., 1918, George Washington University.	
YUNG-CHING YANG.....	China
A. B., 1910, Soochow University; LL. B., 1919, George Washington University.	

Doctor of Philosophy

ELIAS ELVOVE.....	District of Columbia
S. B., 1903; S. M., 1904, University of Kentucky; Phat. D., 1910, George Washington University.	
THOMAS ELLIOTT SNYDER.....	District of Columbia
B. A., 1907, Columbia University; M. F., 1909, Yale University.	
FRANK ALEXANDER WETMORE.....	District of Columbia
A. B., 1912, University of Kansas; M. S., 1916, George Washington University.	

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ACKER, G. N.-2nd (124)	2015 Que St.
ALBION, M. S. (22)	1814 G St., Apt. 1½.
ALDEN, L. R. (21)	Union Trust Bldg.
ALLEN, EDITH (112)	1700 U St.
ALLEN, R. F. (24)	1460 Monroe St.
AMAN, J. (24)	Mt. Ranier, Md.
BARKER, A. (24)	302 S St. N. E.
BARTSCH, P. (21)	U. S. National Museum.
BASSLER, R. S. (21)	U. S. National Museum.
BEALE, R. S. (124)	1318 19th St.
BECKER, G. H.	2936 Upton St.
BENTON, R. W.	1424 R St.
BENTON, H. S. (123)	Room 203, District Bldg.
BIBB, A. B. (21)	1905 H St.
BINGHAM, C. E. (124)	1801 K St.
BISHOFF, A.	Cherrydale, Va.
BOLWELL, ROBERT (22)	3408 Lowell St.
BONNETT, R. W.	1616 Eye St.
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BORDEN, W. C. (122)	2306 Tracy Pl.
BOOTH, N. M.	2101 G St.
BOVEE, J. W. (122)	The Rochambeau.
BOSWORTH, R. (24)	523 5th St.
BOWEN, W. S. (122)	The Farragut.
BRANDENBURG, E. C. (166)	344 D St.
BRECHT, N. D. (124)	609 22nd St.
BREEDING, E. G. (124)	1725 17th St.
BRIGHAM, G. R. (23)	Smithsonian Institution.
BROWN, B. (22)	806 17th St.
BROWN, T. B. (22)	10 Mason St., Cherrydale, Va.
BUTKIEWICZ, J. K. (123)	312 G St. N. E.
BUTLER, W. K. (122)	1207 M St.
CAJIGAS, T. M. (123)	31 E. Oxford St.
CAMPBELL, R. D.	42 Rhode Island Ave. N. E.
CARMICHAEL, R. B. (122)	818 17th St.
CARR, W. B. (124)	1624 Eye St.
CARROLL, MITCHELL (21)	1741 New York Ave.
CHACE, D. C. (23)	Evening Star Co.

CHAPMAN, R. M. (123)	St. Elizabeth Hosp.
CHENEY, W. L. (23)	Rosslyn, Va.
CHEYNEY, W. J. (24)	Rosslyn, Va.
CHIPMAN, C. N. (123)	1420 R. I. Ave.
CHRISTIE, A. C. (123)	1621 Conn. Ave.
CHURCHILL, G. M. (22)	Library of Congress.
CLARKE, B. (23)	707 20th St.
CLARKE, F. W. (21)	1717 20th St.
CLARK, G. F. (123)	Naval Medical School.
CLAYTOR, T. A. (122)	1826 R St.
CLEPHANE, W. C. (166)	Wilkins Bldg.
COHEN, L. (22)	1755 Calvert Pl.
COHEN, R. (124)	New Masonic Temple.
COLLIER, C. S. (166)	2400 16th St.
COLLIER, W. M. (21)	2400 16th St.
CONKLIN, C. E. (123)	1344 R St.
CONLEY, M. J.	921 15th St.
CONNER, L. E.	Anacostia, Sta., D. C.
CONSTANTINI, C. L.	1800 I St.
COPELAND, E. P. (123)	The Rockingham.
COPPING, E. J.	Seat Pleasant, Md.
COPPING, J. B. (125)	R. F. D. "A," Station "H."
CORBY, C. I. (10)	Rockville Pike, Md.
COTTRELL, C. L. (24)	2140 G St.
COUTINHO, J. S. (22)	Pan American Union.
COX, O. C.	Falkstone Court.
CRANE, A. B.	1424 Eye St.
CROISSANT, D. C. (21)	Mass. Inst. of Tech., Cambridge, Mass.
CRUICKSHANKS, B. C. (23)	1336 Fairmont St.
CULLOM, E. (22)	1424 R St.
CULVER, C. W. (124)	1720 M St.
CUSHMAN, A. S. (22)	1845 B St.
DANFORTH, E. F.	New Varnum Hotel.
DANIEL, F. C. (23)	McK. Man. Train. School.
DANIELS, J. I. (24)	512 Randolph St.
DAVIS, H. C. (10)	1929 18th St.
DAVIS, W. T. (123)	926 Farragut Sq.
DE FARGES, J. R.	The Laclede.
DEFFENBAUGH, W.	Bureau of Education.
DIERSTEIN, A. L. (23)	2023 G St.
DONK, Mrs. P. J. (24)	3367 18th St.
DONNALLY, H. H. (123)	1612 Eye St.
DOYLE, H. G. (22)	5416 33rd St.
DOYLE, J. I. (10)	U. S. Civil Service Comm.
EASTON, C. D. (124)	1327 18th St.

EARNEST, J. P. (166)	2123 N St.
EDSON, J. J.	Equitable Bldg. & Loan Assn.
EINSTEIN, M. B. (24)	619 19th St.
ELLIOTT, H. R.	The Farragut Apt.
ELLISON, E. M. (123)	1720 M St.
ERICKSON, H. A.	2633 13th St.
ERWIN, J. T. (22)	1819 G St.
EVERETT, E. H. (10)	23rd and Sheridan Circle
FANSLER, O. N.	Potomac Bank Bldg.
FERSON, M. L. (166)	The Argyle.
FIHE, A. J. (24)	2307 Washington Circle.
FILLEBROWN, J. P. (123)	Stoneleigh Court.
FLATHER, W. J. (10)	Riggs Bank.
FOLEY, T. M. (124)	901 16th St.
FOWLE, F. E. (22)	2919 Que St.
FRANKLIN, E. T. M.	1729 19th St.
FRANZ, S. I. (21)	St. Elizabeth Hosp.
FRENCH, C. T.	Clarendon, Va.
FUQUA, D. J. (23)	1415 Monroe St.
FULLER, H. G. (123)	1884 Columbia Rd.
GEBHART, A. I. (23)	903 13th St.
GOETZMAN, G. F.	Continental Trust Bldg.
GLOVER, C. C., Jr. (10)	737 15th St.
GORE, J. H. (21)	2210 R St.
GRAY, A. C. (124)	Stoneleigh Court.
GREENE, S. H. (124)	1460 Rhode Island Ave.
GROOVER, T. A. (123)	1621 Connecticut Ave.
GROSVENOR, G. H. (10)	Hubbard Memorial Hall.
HAGAN, W. L.	Real Estate Trust Bldg.
HAGNER, F. R. (122)	The Farragut Apt.
HALL, A. (21)	Naval Observatory.
HALL, C. L. (123)	1408 Chapin St.
HALSEY, W. D. (22)	1801 Wyoming Ave.
HAMILTON, B. (23)	3125 24th St. N. E.
HANNA, J. (166)	Department of Justice.
HARNE, O. G.	904 Eye St.
HARRIS, A. L. (21)	1505 Lamont St.
HARRIS, W. (24)	1505 Lamont St.
HASSELL, J. C. (146)	St. Elizabeth Hosp.
HASTINGS, G. S. (24)	3600 Ordway St.
HATFIELD, W. B.	Naval Medical School.
HAYES, H. J. (124)	1335 H St.
HASTINGS, G. S. (24)	360 Ordway St.
HEMMINGS, H. H.	Y. M. C. A.
HENNING, G. N. (21)	1604 Newton St.
HERTLE, L. (10)	Gunston Hall, Va.
HEWETT, E. L. (22)	1741 New York Ave.

HIGGINS, M. E.	Naval Hosp.
HERRINGTON, M. C.	25 Quincy Pl. N. E.
HILL, C. E. (22)	35 Sycamore Hill, Takoma, D. C.
HILL, E. A. (22)	2246 Cathedral Ave.
HODGKINS, H. G. (22)	2006 N St.
HODGKINS, H. L. (21)	1830 T St.
HOLMES, C. W.	2101 G St.
HONAMAN, K.	2645 N. Capitol St.
HOPKINS, A. (10)	1826 Massachusetts Ave.
HOPKINS, H. C.	826 Connecticut Ave.
HOPKINS, N. M. (22)	2128 Bancroft Pl.
HOPKINS, T. S. (10)	Hibbs Bldg.
HORNADAY, F. A. (122)	3509 14th St.
HUMPHREYS, W. J. (21)	1016 Vermont Ave.
HUNT, E. A.	1416 L St.
HUNTER, O. B. (122)	31 E. Oxford St.
HUNTINGTON, W. H.	3138 Que St.
HYDE, C. W.	The Alabama.
JACKSON, V. B. (123)	The Brunswick,
JENKINS, G. B. (123)	1335 H St.
JENNISON, C. L. (23)	3475 Holmead Pl.
JEWETT, C. H.	2101 G St.
JOHNSON, ETHEL (24)	1207 Emerson St.
JOHNSON, E. E.	2101 G St.
JONES, C. K. (23)	304 Md. Ave.
KALUSOWSKI, H. E. (161)	808 Eye St.
KANE, H. F. (124)	Stoneleigh Court.
KAYSER, E. L. (22)	3129 O St.
KEMBLE, A. (123)	The Cecil.
KERN, R. R. (21)	The Iowa, 13th and O Sts. Apt. 63.
KERR, H. H. (123)	1742 N St.
KILLIAN, C. H. (23)	Patent Office.
KILLINGER, W. C.	632 C St. N. E.
KING, A. (166)	A. E. F., France.
KING, WILLIAM BINFORD (124)	Virginia Highlands, Va.
KING, WILLIAM BRUCE (10)	726 17th St.
KLINE, S. R. (23)	1816 18th St.
KNAPP, M. A. (10)	Stoneleigh Court.
KNOTT, C. O. (124)	1006 Eye St. S. E.
KOCHENDERFER, C. C. (22)	Copley Courts, Apt. 211.
KRAMAR, C. F. (23)	College Park, Md.
KREHBIEL, E. H. (23)	1016 9th St.
LAPHAM, J. R. (22)	1829 G St.

LARKIN, T.	Navy Yard.
LARNER, J. B. (10)	900 F St.
LATIMER, J. W. (166)	Wilkins Bldg.
LAWSON, H. W. (122)	1760 Rhode Island Ave.
LAYTON, R. E.	3019 O St.
LEECH, F. (122)	1359 Columbia Rd.
LEFFLER, H. H. (23)	Naval Medical School.
LEPPER, H. A. (23)	1417 Allison St.
LEWIS, H. S. (124)	1219 Vermont Ave.
LEWIS, N. D. C. (123)	St. Elizabeth Hosp.
LINVILLE, T. (123)	2517 14th St.
LISNER, A. (10)	Palais Royal.
LITTLEHALES, G. W. (21)	2132 Le Roy Pl.
LITTLEPAGE, W. H. (124)	The Alabama.
LOHR, V. J.	Union Savings Bldg.
LYON, Q. (24)	636 S. Carolina Ave. S. E.
MCARTHUR, L. E. (22)	2112 F St.
McCULLOUGH, J.	1107 P St.
McDANIEL, A. B. (22)	7th and B Sts.
McFALL, J. M. (166)	1710 M St.
McKIMMIE, O. A. M. (122)	The Valois.
McLAIN, C. (166)	Treasury Dept.
McLAUGHLIN, T. N. (10)	1736 Connecticut Ave.
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MACMILLAN, J. T. (22)	207 A St. S. E.
MALLORY, W. J. (125)	1720 Connecticut Ave.
MANKEY, H. (24)	2914 11th St.
MARBURY, W. B. (124)	1717 20th St.
MARSH, E. G. (23)	922 Maryland Ave. N. E.
MARTIN, T. C. (122)	The Rochambeau.
MASON, J. R. (24)	808 9th St.
MASON, L. M. (124)	The Rochambeau.
MEAD, S. V.	1120 Fairmont St.
MERRILL, G. P. (21)	1422 Belmont Rd.
MERRILL, W. H.	Garfield Hosp.
MERRITT, E. A. (123)	1621 Connecticut Ave.
MESS, C. J.	921 15th St.
METCALF, J. (22)	2023 G St.
MICHELSON, T. (22)	Smithsonian Institution.
METZEROTH, M. (24)	119 12th St.
MILLER, G. B. (122)	1730 K St.
MITCHELL, J. F. (123)	1344 19th St.
MONCRIEF, W. H. (122)	Office of Surgeon General.
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MOORE, M. J. (24)	111 Tennessee Ave. N. E.

MOORE, W. C. (123)	The Wyoming.
MOORE, W. L. (21)	Rockville, Md.
MORRIS, G. G. (124)	1913 14th St.
MORRISON, R. L.	Seat Pleasant, Md.
MUNROE, C. E. (21)	Forest Glen, Md.
MYERS, R. E. (123)	1335 H St.
NELSON, AGNES (24)	2524 17th St.
NICHOLS, H. B. (24)	6402 Connecticut Ave.
NICHOLS, J. B.	1321 Rhode Island Ave.
NORSWORTHY, L. D. (22)	1731 Kilbourne St.
NOYES, E. R. (22)	1212 Kenyon St.
Noyes, T. W. (10)	Care of <i>Evening Star</i> .
O'CONNELL, F. C. (166)	D. C. Supreme Court.
O'MALLEY, M. (124)	St. Elizabeth Hosp.
PAGAN, A. E. (123)	The Rochambeau.
PALKIN, J. R.	710 14th St.
PARKER, B. W. (166)	Woodward Bldg.
PATTISON, G. K. (23)	2023 G St.
PAYNE, J. B. (10)	1601 I St.
PAYNE, L. M. (24)	Ballston, Va.
PEELE, S. J.	Chevy Chase, Md.
PERKINS, H. C. (10)	1701 Connecticut Ave.
PETER, A. (116)	Wash. Loan & Trust Bld.
PHILLIPS, F. M. (23)	3120 Warder St.
PHILLIPS, G. W. (23)	612 18th St.
POLE, S. B. (124)	Northbrook Courts.
POLLNER, N. B. (24)	32 Park Pl.
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PRYOR, J. C. (22)	Naval Medical School.
PUTZKI, P. S.	911 16th St.
RAFTER, R. R.	The Kedrick.
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RAWLINGS, J. B. (23)	2023 G St.
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SCHAAF, M. E. (24).....	1824 Monroe St.
SCHAPIRO, ISRAEL (22).....	Library of Congress.
SCHATZ, E.....	1840 2nd St.
SCHMIDT, A. F. W. (21).....	35 Bryant St.
SCHMITT, W. L. (23).....	Smithsonian Institution.
SCHNEELY, M. I. (166).....	1448 Park Rd.
SCHOENFELD, H. H. (124).....	3448 34th St.
SCHOENFELD, H. (21).....	3448 34th St.
SCHRIEBER, F. C. (124).....	1726 M St.
SCHULZ, W. H.....	1335 H St.
SEIBERT, E. G. (123).....	1545 Eye St.
SELAH, M. (24).....	17 Third St.
SELBY, J. H.....	1206 18th St.
SELLNER, A. E.....	1335 H St.
SHANDS, A. R. (122).....	901 16th St.
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SIMPSON, C. A. (123).....	1219 Connecticut Ave.
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SMITH, C. S. (21).....	304 Takoma Ave.
SMITH, E. S.....	1101 17th St.
SNOWDEN, E. (123).....	1900 S St.
SPEAR, A. A. (23).....	4 Sixth St. N. E.
STAFFORD, W. P. (166).....	1725 Lamont St.
STAVELEY, A. L. (122).....	1744 M St.
STAYTON, W. H. (116).....	Southern Bldg.
STERRETT, J. M. (21).....	Pierce Mill Rd.
STIEFEL, C. V.....	Cherrydale, Va.
STITT, E. R. (122).....	1708 R St.
STOCKTON, C. H. (22).....	2017 O St.
STOUT, J. D. (123).....	1335 H St.
SULLIVAN, R. Y.....	The Rochambeau.
SUTTON, L. H. (166).....	McLaughlin Bldg.
SWETT, O. D. (21).....	Chevy Chase, Md.
SWISHER, C. C. (21).....	1810 Kalorama Rd.
SYMMONDS, K. (24).....	The Marne.
SYMMONDS, H. U. (23).....	2536 37th St.
TAIT, B. (24).....	Western Ave and Ellicott St.

TAYLOR, J. N. (23).....	Lisner Hall.
TAYLOR, J. W.....	1616 Eye St.
TEILLARD, X. (23).....	The Garland.
TEWKSBURY, W. D. (124).....	4107 14th St.
THOMPSON, H. C.....	Real Estate Trust Bldg.
THOMPSON, J. L.....	1404 M St.
THURSTON, E. L. (10).....	1414 Madison St.
TIBBETTS, G. C. (23).....	321 Essex Ave., Chevy Chase.
TIBBETTS, A. P. (124).....	1430 Rhode Island Ave.
TITUS, E. W.....	The Rochambeau.
TRIMBLE, R. S. (124).....	722 18th St.
TUCKERMAN, W. R. (10).....	Wilkins Bldg.
VALAER, P. J. (23).....	Bureau of Internal Revenue.
VAN METER, A.....	5210 Illinois Ave.
VAN ORSTRAND, C. E. (22).....	1607 31st St.
VAN VLECK, W. C. (166).....	The Victoria.
VENNATTI, P. C. (23).....	1335 H St.
WARNER, H. O.....	1842 Monroe St.
WARREN, L. (24).....	1341 Columbia Rd.
WASHBURN, W. I. (10).....	2029 Connecticut Ave.
WATKINS, M. H.....	1429 Clifton St.
WATKINS, M. L.....	1335 H St.
WEINSTEIN, M. (23).....	3410 M St.
WESTCOTT, L. (24).....	1433 L St.
WETMORE, A. (23).....	1912 Hamlin St. N. E.
WHEATLEY, C.....	The Montana Apt.
WHITE, C. S. (123).....	911 16th St.
WHITE, H. (10).....	1229 19th St.
WHITE, W. A. (122).....	St. Elizabeth Hosp.
WHITSON, A. J. (23).....	1209 Ohio Pl.
WILBUR, W. A. (21).....	1205 Columbia Rd.
WILEY, V. B. (24).....	2023 G St.
WILKERSON, T. R.....	The Burlington.
WILSON, J. H. (23).....	1436 W St.
WOLFE, A. S.....	710 14th St.
WOODHULL, M. V. Z. (10).....	2033 G St.
WOODMAN, L. C. (23).....	1222 11th St.
WOODWARD, F. A. (23).....	751 Quebec St.
WYMAN, W. W.....	724 Upshur St.
YARROW, H. C. (122).....	814 17th St.
YOUNG, H. C.....	Potomac Savings Bank Bldg.
YOUNG, J. L. (23).....	2517 Wisconsin Ave.

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FORM OF BEQUEST

One hundred thousand dollars will establish a chair, five thousand dollars a scholarship, and one thousand dollars a prize, in any department of the University.

"I give and bequeath to the George Washington University, of Washington, D. C., the sum of _____ dollars, free from legacy duty or tax, the same to be used as its Board of Trustees may determine (or, in case of a special gift, stating the terms of the gift)."

A PRAYER*
BY
GEORGE WASHINGTON

Almighty God: We make our earnest prayer that Thou wilt keep the United States in Thy holy protection, that Thou wilt incline the hearts of the citizens to cultivate a spirit of subordination and obedience to government; and entertain a brotherly affection and love for one another and for their fellow-citizens of the United States at large. And finally that Thou wilt most graciously be pleased to dispose us all to do justice, to love mercy and to demean ourselves with that charity, humility and pacific temper of mind which were the characteristics of the Divine Author of our blessed religion and without a humble imitation of whose example in these things we can never hope to be a happy nation. Grant our supplication, we beseech Thee, through Jesus Christ, our Lord. Amen.

* This prayer is used regularly at "The President's Chapel" of the George Washington University, and voices the aspirations of the University for the fulfillment of civic duties and the promotion of national welfare.

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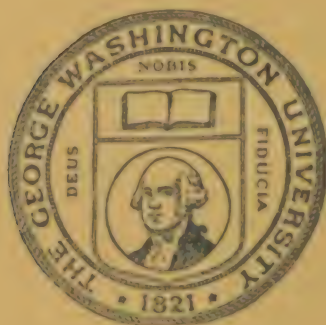
George Washington University Bulletin

I.—THE NINETY-NINTH COMMENCEMENT,
MAY 31, 1920.

ADDRESS OF THE BRITISH AMBASSADOR.

II.—UNIVERSITY ANNOUNCEMENTS.

III.—ADDRESSES BY PRESIDENT COLLIER AND PRO-
FESSOR STAFFORD.



MAY, 1920

PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C., MONTHLY DURING
THE UNIVERSITY YEAR, OCTOBER TO MAY INCLUSIVE, EIGHT TIMES A YEAR

Entered October 6, 1904, at Washington, D. C.
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ENROLLMENT FOR 1919-20

The enrollment for the university year, 1919-20, which began with the opening of the Summer Schools in June, 1919, immediately after the Annual Commencement, is as follows:—

Summer School, Arts and Sciences	460
Summer School, Law	207
Total Summer Schools	667

Note:—This exceeds the previous year, Summer Schools, by 280. It is confidently expected that next year's Summer Schools will have an enrollment of at least 800.

Enrollment in the yearly courses which began with the re-opening of the University on September 24th, 1919, has been as follows:—

Arts and Sciences:

The Graduate School	205
Columbian College	1888
College of Engineering	530
The Teacher's College	334
Total Arts and Sciences	2957
Medical School	117
Dental School	74
Pharmacy School	12
Nurses' Training School	31
Total for Medical Dept. including nurses	234
Law School	752
Total, exclusive of Summer Schools	3943
Grand total of Students enrolled between the Commencement of June 18, 1919, and May 17th, 1920, including Summer Schools of June—August, 1919	4610
Estimated gross enrollment (excluding duplicates) during the previous year, 1918-1919	*3068
Gain in gross enrollment, present year up to May 17th, 1920, over entire period of previous year	1542
Number of enrolled students on March 17, 1920 **	2968
Number of enrolled students on May 12, 1919 **	1780
Gain over last year	1188

*This number which includes about one half of the 491 members of The Student Army Training Corps and about one half of the 387 students in the Summer Schools (that being the number estimated as not having re-enrolled in regular classes) was about 700 more than the largest previous enrollment in any year in the University's history.

**The figures for May each year are less than the total enrollment for the corresponding year because they do not include: (a) students in summer courses; (b) graduates at the Convocations in October and February; (c) students who have been obliged to give up their courses after enrolling.



THE NEW BUILDING OF THE LAW SCHOOL
1435 K STREET, McPHERSON SQUARE, FORMERLY THE DEPARTMENT OF JUSTICE

DOCTOR OF LAWS

JOHN JOSEPH PERSHING, General of the Armies of the United States. He has attained the chief command because, from the lowest rank to the highest, the tasks assigned to him have been promptly done, thoroughly done, faithfully done. The path of duty has been the way to glory. Endowed with modesty, as well as with military genius, we may truly say of him as Tennyson said of Wellington:

"Our greatest yet with least pretence,
Great in council and great in war,
Foremost captain of his time,
Rich in saving common-sense,
And, as the greatest only are,
In his simplicity sublime."

DOCTOR OF LAWS

AUCKLAND CAMPBELL GEDDES, educator, soldier, administrator, diplomat; for many years a Professor of Anatomy in the University of Edinburgh and in the Royal College of Surgeons at Dublin; later Minister of Reconstruction of Great Britain; displaying in the first position profound knowledge of the human body and in the second, consummate skill in putting together the shattered body-politic; today as British Ambassador to the United States demonstrating that he understands human nature as well as the human frame. This degree of Doctor of Laws is conferred upon him as a recognition of his own pre-eminent talents and achievements and his invaluable services to his country and to humanity; also as a compliment to the great sister institution of learning, McGill University, of which he was principal-elect when accredited to the United States; and also a tribute of our admiration and gratitude to the mighty Empire which he so worthily represents and whose laws and customs and institutions have so profoundly influenced those of our own land and have served as an inspiration to freemen everywhere.

Immediately after the British Ambassador had been invested with the hood the band played the national anthem of Great Britain and, after a brief pause, "The Star Spangled Banner."

The benediction was then pronounced by the Reverend Dr. Randolph and the academic procession moved out of the hall.

COMMENCEMENT ADDRESS
OF
SIR AUCKLAND CAMPBELL GEDDES
British Ambassador at Washington
BEFORE
George Washington University
May 31, 1920

MR. CHAIRMAN, LADIES AND GENTLEMEN :

Tonight many of you pass a milestone on the road of life—birth, school, college, graduation, are the common landmarks in the pre-professional life of the university man. Of these the graduation stone is in many cases the most memorable, for just beyond it comes the point at which all must leave the highway they have trodden with the care-free crowd of their contemporaries to pass into the jungle of life and cut their own trail. For most the bush is thick and thorny; the ground rough and rocky. He is rare who never casts regretful longings backward to the road that ended for him just beyond the graduation mile.

One peculiarity of that jungle is that none who has gone before can tell the new recruit what difficulties he will meet or what clearings he may hope to find. Still an elder member of the brotherhood of university graduates may be able to peer a little farther through the bush or perhaps his acquired knowledge of life-woodcraft may make it not too unwise for him to give advice that may save some bleeding feet.

Let us take a general view, if possible a world view, for a few moments.

I doubt if ever before was the future for so many nations, as many individuals, so closely shrouded in dark clouds pregnant with storm. As one looks ahead there is little light save when dazzling flash on flash writes a great interrogation on the murky background.

In Europe we know that an age is dying. Here it would be easy to miss the signs of coming change, but I have little doubt that it will come.

A realization of the aimlessness of life lived to labor and to die, having achieved nothing but avoidance of starvation and the birth of children also doomed to the weary treadmill has seized the minds of millions. The lightnings as they flash the great interrogation sear their eyes. They

ask Why? They say to one another Why? They look and see, others who picnic by flowery paths while life slips by, themselves and their like grimy with toil and spent with labor. For them evening and morning, night and day, storm and shine pose the same problem—Why?

You and we and all our allies have fought together the greatest war that was ever fought—we have suffered and inflicted untold misery. Millions of young men have gone to their death serene in the faith that they died for a cause worthy of sacrifice. Millions more have died angry and protesting and asking—Why? Why was life and happiness and love not for them? Why were they doomed to suffer incredible hells on earth?

Questioning everything, accepting nothing, humanity moves once more. So far, only the swell of the storm centered in Europe laps your coasts; yet your daily press is already filled with news of strikes of what is vaguely called industrial unrest.

We all know that it was your tradition to keep clear of European entanglements—here is a European disentanglement that is already piling the waters on your social beaches, a disentanglement of the complicated interweaving of man and man in the social fabric.

Into a storm-racked world you new graduates have to pass and press forward in a struggle demanding your every effort. To press forward, yes; but whither?

I have asked myself that question all my conscious years. In search of an answer I have read many books, some that men would call sacred, some the reverse. I have tried to understand anatomy and embryology in the widest meanings of those terms. I have studied comparative religion and have trodden slowly and laboriously in the footsteps of Sir James Frazer in his mazy dance around "The Golden Bough." I have searched the poets. I have spent years about the business and I still ask myself—"Wither?"

I cannot tell you. I do not know. But some things have become clear to me.

First, I believe that there is a great purpose running through all our strivings which is not of us, but from above us. The end to which that purpose moves is impenetrably hidden from mortal eyes, but the direction in which the

end lies, the direction in which we should move, is not hidden, but clear.

We are not as beasts. We have power to choose and to decide. We are not physically great and powerful creatures. We have not horns and hoofs and scales. But though our bodies are weak and soft, our brains are things of marvel, and through those brains there comes to each of us many different thoughts and promptings, but to all of us come three that are not animal in origin, are not concerned with the life of the body, but are, I believe, beams from spiritual lighthouses for the guidance of our earthly voyage.

I used to be a teacher and was happier teaching than I have ever been before or since, but as I look back I see that my pupils taught me nearly all that really matters which I know. They taught me that in my years of study, in my delvings into books, in my work in the research laboratory, I had been looking in the wrong place for the answer I sought. They taught me that the book which contained the truth was the human heart.

In that warm palpitating book I read and learned that each of us had a desire inborn, an instinct, if you will, for beauty; a desire to serve his fellows; a desire to know the truth.

I do not mean that each sees beauty as each other sees it. But within the range of his understanding, within the limits of his vision, each desires beauty in his surroundings, beauty of form, beauty of color, beauty of sound.

Again, I do not mean that each sees service to his fellows in the same light, but the impulse to serve, the instinct of altruism, is in the heart of each.

Again, I do not mean that each is interested in the same branch of knowledge, but the desire to know the truth is there.

What I do mean is that each young soul, still tender from its earthly birth and not hardened by the hammer of the world, has these three longings. It is true that the first, the desire for beauty, links with the impulse of sex; that the second, the desire for service, links with the most wonderful of the animal instincts, mother love, yet each is so

different from its linked animal instinct as to be separate from it. The third, the desire for truth, links with nothing that I know of, unless it be the instinct of curiosity.

In many adults these spiritual desires are atrophied and have ceased to trouble or to guide the man or woman, but in simple people they are apt to remain alive in a way and to an extent that astonishes the sophisticated. To retain the eyes of the child, to see the world anew every morning, is a privilege shared by few of the learned and fewer still of what men call the successful.

In some the desire for knowledge is atrophied, though the other two remain. In more the desires for knowledge and for service are atrophied, though the desire for beauty remains, but these are maimed beings who have lost something more wonderful and more precious than any wealth or any position can buy.

The great danger which attaches to university education is that it kills the thirsts for beauty and service and limits the desire for knowledge to the field of a microscope—sometimes to the field of a high-power oil immersion objective and replaces the glad free roaming after truth by a seeking for all knowledge in the slime of the cart rut. That is the danger of specialization.

One of the reasons for the present mental turmoil of the peoples is that their leaders have lost the spiritual instincts, while they in some measure have retained theirs. The simple know less and feel more, and despise those who know more and feel less.

That is the danger. Knowing nothing, or at best, little of the civilization which knowledge has made possible through the application of steam and steel and credit to the affairs of men, many of the common people are seeking to give free rein to feeling uncontrolled by understanding. That way lies disaster. Without continuous application of knowledge the edifice of civilization will fall down, but without continuous application of the three spiritual instincts to the ordering of society it will blow up. The fact that civilization is in danger in parts of Europe is proof that the leaders and rulers of the past either never knew or forgot that merely to apply specialized technical knowledge is to give a stone to humanity clamoring for bread.

You are to be leaders or you will be nothing. If after your university training you are not in the way to qualify for leadership you had better plough the land or grow food for the peoples, for a university man or woman who is not at least a subordinate leader is a parasite, or at best a seton in the body politic. And to you leaders of the future I hand all the knowledge that remains to me from years of striving to find the answer to the question, Whither?

It is simply this: Humanity moves to a haven which we cannot see, but though the sea is dark there are three light-houses to help each pilot, and the first of these is beauty, the second, service, the third, truth. Keeping those three ever in view, civilization will sail safely. Let one be occulted and civilization is in danger. Let two be occulted and peril is nigh. Let three be occulted and civilization falls.

Thus Babylon fell, thus Egypt, thus Rome, in many ways the greatest and proudest civilization that has been. So I doubt not fell all the civilizations of the past. So today civilization totters.

To you and to those like you the civilization of the world is committed. Be faithful to your trust. Before almost you have realized that you are no longer boys and girls you will find yourselves the men and women of the new generation.

If anyone had spoken to me the day I obtained my first degree as I have spoken to you tonight I should have written him down a consummate ass. I was sure then where I am uncertain now, or am now certain in an opposite sense to my earlier surety. If the effect of education has been in the case of any one to turn him or her into an atheist or an agnostic or a materialist or any other brand of non-religious thinker I beg him not to imagine that he is the first or will be the last. Let him not commit himself for ten years to any expression of opinion in that direction. Let him wait for the revelations and miracles that are to come, for the days of revelations and of miracles are not yet ended.

No man could have had a much more romantic or interesting life than I, and yet I almost find it in my heart to envy you. Why? Because the next fifty or sixty years are going to be the most glorious or the most disastrous in the history of the world. My generation cannot hope to

see a successful end to the world revolution which is now in progress, though yours may. You have still a few years in which to grow strong in the battle of life before the full burden of responsibility descends upon you. You must prepare. Let me tell you how. Keep ever before you the sense of your responsibility. Seek without ceasing an answer to the question, whither away? And, though you will never know the end to which the great purpose moves, there will be continually revealed to you the general direction in which to press. Keep the three lights of life steadily in your own view. Help your fellow-men, not to lose them from their sight. Bend all your knowledge and all your power to the day's work. Thus you will live greatly.

Today is the day on which you recall the names and glorify the memory of those who died for America. They gave their all for you. It was hard for them to leave their cheerful and happy world even for a great cause, and you do well to hold them in pious memory, but for some it is harder to live for the same great cause, the cause of freedom and right and humanity. I hope that the call will come to you to live and not to die, but whichever is your lot you will find it difficult. Believe me, to live rightly requires much more understanding, much more vigilance than to die nobly. I urge you to dig deep into the hidden meanings and implications of the spiritual longings for beauty, service and truth, and if my wishes can benefit you now or hereafter I wish you, novitiates in the brotherhood of university men and women, health and strength to serve and happiness in serving the nation to which you owe allegiance and through which, if you so will, you can serve mankind.

THE NEW LAW BUILDING.

The George Washington University announces the purchase of a high class building for the Law School. This property is located at 1435 K Street. It was for many years the home of the Department of Justice, until that Department moved into its new building, just across Vermont Avenue. The property fronts on McPherson Square and is thus; one block from the University Club, and the Department of Justice; two blocks from the Cosmos Club, Shoreham Hotel, and the Arlington Building, now occupied by the War Risk Bureau; and four blocks from the White House. It is within one block of the 14th Street car line and two blocks of the Connecticut Avenue line.

The lot on which the building stands has a fifty-six-foot frontage on K Street and has a depth of one hundred and twenty feet. The building covers most of the lot. It is a four-story structure, the front being of brown stone and the other walls of brick. There is under it a spacious and well lighted basement available for a men's lounging room, lockers and storage purposes. The building contains ample space to house the entire Law School.

Extensive alterations will be made during the summer. The tentative plans contemplate that there shall be two large class rooms on the third floor and two large class rooms on the fourth floor, the second floor will be occupied by the library, professors' offices and a woman's room, while the first floor will be used for administration offices and moot court rooms. Alterations have already been commenced and it is expected that the building will be ready for occupancy by September first.

The Law School has for the past ten years occupied the fifth and sixth floors of the New Masonic Temple. When the Law School came to these quarters in 1910, it had about 333 students. The comparatively high standards had the tendency to cut down its attendance. As years passed by

and young men and women came to appreciate the advantages of high standards honestly enforced, the school began to grow rapidly. The result is that the school has entirely outgrown its present quarters. During the year just closing it has been necessary to hold a class of 150 students each afternoon in the Medical Building.

LAW SCHOOL NOTES.

Our registration for the year 1919-20 is as follows:

First Year	425
Second Year	122
Third Year	94
LL. M. students	24
Special	87
<hr/>	
Total	752

While statistics are not all available, it seems probable that not more than one other school in the Association of American Law Schools has a larger attendance this year than has the George Washington University Law School.

The first year class during the year just closing has been conducted in three sections and the indications are that it will be necessary to conduct each of the first and second year classes next year in three sections. The morning section which was almost entirely wiped out during the war is growing rapidly. During the past year there were fifty-eight students registered in the first year morning section. This multiplicity of sections makes necessary the addition of two full time teachers to the present faculty. One of these, Mr. Albert Levitt, A. B. Columbia, and LL. B. Harvard, has already been procured.

The Summer Session of the Law School will begin on June 21st. For information, apply to the Secretary of the Law School, New Masonic Temple.

EXTENSIVE IMPROVEMENTS IN THE UNIVERSITY MEDICAL SCHOOL.

The Trustees of the University after a year's careful investigation into the question of medical education in the District of Columbia have announced an important decision establishing a new policy. Owing to the universally admitted impossibility of maintaining a Class A medical school even of moderate size at an expense of less than \$25,000 in excess of the amount that can be derived from the tuition fees and owing to the constantly rising standards and increasing requirements fixed by the Educational Council of The American Medical Association, whose classification and grading of Medical Schools have virtually the effect of law, the trustees have voted to appropriate annually, from the general funds of the University or from the receipts of subscriptions, for the maintenance of the Medical School, the sum of \$25,000, for a period of five years, prior to the expiration of which time it is confidently expected that a permanent endowment yielding an annual income of this or larger amount will have been obtained. The \$25,000 thus appropriated will be in addition to the revenue of the Medical School derived from the fees paid by students and from all other sources. It will be used in the payment of salaries to additional full-time professors, in some increases to those who have already long served on the teaching staff at salaries that are inadequate, in the establishment of a medical museum, the enlargement of the library and in additions to the equipment of the laboratories.

In compliance with recommendations recently made by officers and agents of The American Medical Association, that there be a complete separation of medical and dental teaching, the entire medical building at 1335 H Street, adjacent to the University's Hospital and Infirmary, now occupied by the Dental School as well as the Medical School, will hereafter be devoted to medical instruction and to instruction in chemistry. The step had to be taken in order to obtain adequate laboratory space. The interior of the building will undergo considerable alteration. To effect these improvements the Board of Trustees has authorized the expenditure of \$4,000.00 in addition to \$25,000.00 appropriated annually for school maintenance. The work will begin on June 15th, so as to be completed for the opening of the School on September 29th.

The changes and improvements which are being made will, it is believed, not only make it possible for the School

to keep its position in Class A, the highest class, but with the many incidental facilities furnished by the city will enable it to offer the very best instruction in medicine and to assume in a short time that commanding place which a school in the National Capital should have.

The impossibility, after a long search, of finding a suitable separate building for the Dental School, coupled with the fact that it could not be maintained as a separate school, in a creditable manner, except at an annual deficit of \$25,000, besides an additional initial expense of \$19,000 for installation of equipment, has caused the Board of Trustees to vote, upon the recommendation of a Committee composed of Dr. Wm. S. Washburn, Mr. T. S. Hopkins, and Mr. H. C. Davis, to discontinue the Dental School at the close of the present academic year.

The trustees regret the necessity of such action but feel that to continue the Dental School would be an unwarranted burden upon the other departments of the University, and furthermore that it is not to the interest of the institution to continue a school which because of lack of funds and equipment is in Class B rather than Class A. It is their hope that a University drive will be started in the fall and that an endowment of \$500,000 for the Dental School can thus be obtained. No smaller sum will suffice to maintain a first-class modern dental school, and in closing its school until such a fund can be obtained, The George Washington University is following the lead of a number of the leading universities of the country which like it prefer to maintain no department or school which cannot be kept up to the highest standard.

For the present the University's efforts will be concentrated upon the Medical School.

This School is now in its ninety-fourth year, having been opened in March 1825. It is the eleventh existing medical teaching institution in the United States in chronological order of establishment and has given degrees to 1,460 graduates in Medicine.

Like many other medical schools in this country, it was first independent. Later it was loosely affiliated with the Columbian University and finally became an integral part of that institution sometime before the University, by virtue of the act of Congress, approved January 23rd, 1904, changed its name to The George Washington University.

In 1898, in order to increase the facilities for clinical teaching, a University Hospital and University Dispensary were established.

For many years the school had late afternoon and evening sessions, but in 1908 the University directed that all such classes be discontinued and that day sessions only should be held. This was the first step toward modernizing the school.

In 1902, the old Medical Building in which the teaching had been conducted since 1867, was replaced by the larger and more commodious structure which the school now occupies located at 1335 H Street, about one block and a half east of The Shoreham Hotel. In 1903, an addition materially enlarging the hospital was opened.

In 1909, new ordinances were adopted by which the school, the hospital and the dispensary were completely amalgamated according to the most approved ideas for medical teaching.

The Department of Medicine of the University thus became a complete medical educational unit consisting of a Medical School, a University Hospital and a University Dispensary. The Hospital and Dispensary came under the same management as the School and the clinical teachers in the School took charge of the clinics in the Hospital and Dispensary so that the work in School, Hospital and Dispensary was completely correlated.

The University Hospital is located at 1339 H Street. It has a capacity of 105 beds. Its clinical capacity is 50 beds.

A Nurses' Training School has been maintained in connection with the Hospital since 1903 and has graduated about 200 trained nurses. The Nurses' Home is at the Corner of 13th and L Streets. It has been completely re-decorated the past year, the expense of this having been met by money raised by efforts of the very devoted and efficient Board of Lady Managers who for many years have been of greatest assistance to the Hospital and Nurses Training School.

Last Fall The National School of Pharmacy at 808 Eye Street was merged into the Medical Department as an integral part of it.

Standing of Graduates of Medical School in State Examinations.

A graduate in medicine cannot practice in any state in the United States until he has passed an examination before a State Medical Examining Board. The percentage of successes and failures of candidates from any medical

school in State Board Examinations is therefore indicative of the educational efficiency of the school. The standing of graduates of the George Washington University Medical School before State Boards compares very favorably with that of other medical schools. It is one of the few schools whose graduates had no failures as a result of the examinations before the state medical boards during the year 1918, and they were equally successful in 1919.

A recent number of The Journal of The American Medical Association gives official figures showing the per cent of failures of graduates of the leading medical schools of the country for 1919. Thirty-three graduates of George Washington University took the examinations in different states. Not one failed.

The following gives results for several leading medical schools in the United States as published in the article referred to:

Medical School.	Percent of Failures.
George Washington University.....	0.0
Georgetown University	13.0
Howard University	24.1
Northwestern	3.6
Illinois	3.7
Johns Hopkins	3.5
Maryland	8.2
Harvard	3.0
Tufts	13.7
Michigan	4.2
Detroit	5.7
Albany	14.8
Columbia	8.1
Cornell	7.3
Syracuse	0.0
Long Island	11.8
Bellevue	12.6
Jefferson	5.2
Pennsylvania	8.5
Vermont	19.4
Medical College of Virginia.....	35.6
University of Virginia.....	0.0
McGill	23.1
<hr/>	
Average of all Medical Colleges....	14.3

Classification.

In order to inform prospective medical students in what schools they can obtain adequate instruction, The American Medical Association since 1909 has annually inspected and classified all Medical Schools in the United States grading them as Class A, B or C, according to their facilities and work. The "A" schools are of the highest grade, and the George Washington Medical School has always held this rank. It meets all the premedical and medical requirements of every State Medical Examining Board in the Union and its graduates are eligible for all Government examinations, including those for appointment to the Medical Department of the Army, the Navy, and the Public Health Service.

Foreign Recognition.

In addition to full recognition in the United States it is accredited by the Royal (combined) Medical Examining Boards of London, England. There are but nineteen of the eighty-six medical schools in the United States which have the distinction of this recognition, and our school is the only one in the District of Columbia and the only one south of Johns Hopkins University so accredited. A graduate of our school, upon presenting his diploma, can be admitted to the fifth year in any medical school in England, and upon the completion of it and upon taking the final examinations, can be registered to practice anywhere in the British possessions.

THE DYE STUFFS AND EXPLOSIVES LABORATORY

The George Washington University has recently fitted up the upper floors of its Pharmacy Building at 808 Eye St., as a chemical laboratory for special research in dye-stuffs and explosives. A number of very important problems are now being solved. Mr. George W. Phillips, formerly a Captain in the Chemical Warfare Service of the Army, Instructor in Chemistry, has been made Director of the Laboratory, under the general supervision of Professor McNeil, head of the Chemistry Department. Professor-emeritus Charles E. Munroe, one of the world-recognized experts in explosives, and inventor of smokeless powder, will act as Consulting Chemist.

The lower floor of the building will continue to be used by the Department of Pharmacy, under Dean Kalusowski.

THE REVIVAL OF ATHLETICS AT GEORGE WASHINGTON.

BY H. C. BYRD

Ask ten persons what is meant by education and the chances will be good for ten different answers. One extreme is likely to come from those that believe "culture" the sole reason for acquiring knowledge; the other, from those that see nothing in education but the acquirement of a commodity which can be traded for dollars and cents.

Whatever may be the definitions of education offered by the old school or by the modern radical, it remains that the best education is that which equips men and women to render the greatest possible service to their fellows. It, therefore, follows that the educational organization which does not offer opportunities for such development fails to measure up to the needed standard.

An educational institution which sends out graduates without knowledge of the usual activities which surround healthful community life is not functioning with the best interests of the nation in view. Community problems, urban or rural, are largely similar. How best to educate men and women to take positions of leadership in meeting such problems is a question which the educational world is finding it difficult to answer.

To meet this difficulty, to offer in the National Capital something unique in university life, George Washington aims to foster the development of community activities as a part of its general plan of education; after all, the university is a community, face to face with most of the problems and difficulties of the average community. In doing this, the University is not trying to work out anything in the way of a radical sociological experiment, but has evolved a definite system of organization under which it plans to operate all activities that relate to its student life and to develop them as a part of its effort to equip men and women for their professions.

About two months ago, the Board of Trustees ratified and adopted a plan to bring about the desired development. This plan provides for the appointment by the Board of Trustees, upon recommendation of the President, of a Director of Student Activities, the director to be chairman of a Board of Managers charged directly with responsibility for student activities.

Component parts of a university are the faculty, alumni, and students, and the personnel of the Board of Managers is such as should unify these interests. The Board is made up of three members of the faculty, one each from the Departments of Medicine, Arts and Science, and Law; two members of the Alumni Association; and two students. The faculty members are to be appointed by the President, alumni by the President of the Alumni Association, and students by the Students' Council.

Under the new arrangement, the publications will be organs of the university community, and every factor in the development of other lines of activities will be representative of the three great influences which should shape the life of the University. In other words, the arrangement provides for complete co-operation of faculty, alumni, and students in all things which affect their related interests.

While naturally there will be many activities, perhaps the development of a complete program of athletics will be the largest. George Washington is going back into competitive sports in two ways; in one, to take its place in intercollegiate competition as the logical representative of the National Capital; the other, to offer eventually a complete system of intra-mural games, so that every student will be able to derive the personal benefits which accrue from participation in physical contests.

Without necessity for argument, it generally is recognized that the greatest factor in developing and maintaining a strong morale among students, in unifying the ethical interests of a university, in producing a strong feeling of loyalty and pride in faculty and alumni as well as in students, is athletics. Therefore, it is felt that a broad athletic program is essential; broad in the sense that it encompasses direct relationships with other great universities and in the sense that it is sufficiently far-reaching to touch every student, alumnus and faculty member.

It is not expected that difficulties are not going to be encountered in such a program as has been mapped out, but such difficulties are to be regarded only as obstacles to be surmounted. Somewhat checkered has been the career of the University in athletics, owing at times to a lack of foresight which has caused attempts to build on insecure foundations. Under the new plan the building may be somewhat slow but once the structure is raised it will remain.

Already students are earnestly advocating a movement to raise funds to build a modern athletic field, to embody a gridiron, a base ball diamond for intercollegiate competition and one for intra-mural games, a track, and tennis courts. The bright prospects for this indicates that within the next year or so George Washington will have its own athletic plant, with modern equipment, for the first time since the days of Van Ness Park, thirteen years ago.

The University completed its plans so late that much doubt was expressed about the advisability of attempting to arrange a foot ball schedule for next fall, but it was felt that something should be done to make a start. A schedule is nearing completion, and six or seven games will be played at home and one or two away. The program for next year involves full schedules in base ball, basket ball, and track and two or three branches of girls' sports.

With the desire to take its place in the van of all collegiate activities, intending to offer its students every possible opportunity for development in all things which pertain to a well-rounded education, the University has taken a step which depends for its ultimate success upon co-operation of faculty, students, and alumni. The groundwork has been laid by the Board of Trustees, but others must put up the building. From the men and women within the University and related to it must come the initiative and unification of effort, the driving force which will be needed to produce real results.

College Influences Before the War and After the War

AN ADDRESS

Delivered Before

The Zeta Chapter of Phi Beta Kappa

at the

Commencement Exercises

of

Hobart College

June 14, 1920

BY

WILLIAM MILLER COLLIER,

President of The George Washington University

The titanic struggle from which the world is just emerging has put every human institution to the severest test. The vastly changed conditions resulting from this great upheaval present new problems so important and so perplexing that we are again compelled to examine into the means and methods which we use to accomplish our purposes and to investigate the efficiency of all our agencies. Everyone will concede that of all the instrumentalities employed to advance the interests of mankind none are of more vital or of fundamental importance than those which deal with education. To educate is to draw out, extend and expand; it is to generate, stimulate and co-ordinate the energies of the people. To educate is to consummate. Knowledge is power. The proverb is trite, but its truth is established by national as well as individual experience.

I propose this morning to speak to you about certain features of the educational systems of some of the nations lately engaged in the Great War and about the relations of their colleges and universities to national life in war as well as in peace. While I shall say something about primary and secondary education,—common schools and high schools—the character of my audience requires that I give special consideration to the institutions of higher learning,

some of them called universities and some of them called colleges. The latter term, however, is often used generically for them all and when I employ it in this address, it will, unless otherwise explicitly stated, include universities which seek to give instruction in almost every branch of learning as well as the smaller institutions called colleges which limit the scope of their work and which as a rule do that work with fidelity, with credit to themselves, and with inestimable benefit to the world.

I shall not limit myself to a consideration of the colleges and universities of America, but shall attempt briefly to draw some lessons from the teachings of the World War as to the merits and defects of the educational systems of two other nations, England and Germany, one our great associate power, the other our enemy in the late war. I make no apology for this, because we can learn from foe as well as friend and each may exhibit things for us to avoid as well as things to adopt. I deem it wise to consider the universities of England and Germany and their activity and influence in the war because our small American college is largely patterned after the colleges that compose the English universities, while our American universities, although retaining many of the features of English university life, have been very much influenced by the German universities, from which, prior to the war, they drafted many of their professors. Moreover, England and Germany were in the war much longer than we, and the starting of it by Germany was largely due to her false educational system. To discuss the influence of colleges upon the activities of peoples in war and peace without giving consideration to the methods and aims of German and English universities would be to ignore very powerful factors in the development of civilization and to treat with contempt institutions which are, perhaps with the sole exception of the Catholic Church, the oldest in the world in point of continuous existence, the most venerable, the most securely founded. Some of Germany's universities date back to the middle ages; and Oxford and Cambridge have seen dynasties come and go, constitutions change, nations rise and fall, empires evolved, social systems replaced, and new worlds discovered. *Sic transit gloria mundi*; but colleges and universities are the most enduring of all earthly institutions. I am prompted, moreover, to give extended consideration to the English and German systems of education not merely because their great universities are

historically interesting, but because each of these two systems had its own characteristic and distinctive method and aim; and in American institutions of higher learning these two methods or aims were in conflict or were struggling to find a point of adjustment when the war broke out. Whatever the experience of England and Germany teaches as to the influence of their universities upon national character is of great value to the United States. It is not, of course, an unerring beacon to guide us but it is much more than a side-light.

I regret that lack of time prevents me from giving full consideration to the universities of the other Allies. I wish I might speak of those of Belgium whose burned and pillaged university at Louvain made such a mute but effective appeal to the scholars of the world,—mute, I should not have said, for the very stones of her ruined library cried out for vengeance. I am especially sorry that I cannot make extended reference to the educational system of France whose excellent universities, but especially The Sorbonne at Paris, have ever attracted students, yet never so much so as now when the world has awakened to a realization of their merits and of the exaggerated claims and unduly high rating of the German universities before the war. I regret also that I cannot speak at length about Italy in this connection. There, the first universities in Europe were started hundreds of years ago, at Salerno and Bologna; and to that country we look not only for inspiration in arts and letters but also in science, particularly in that relating to electricity. Lovers of learning not only revere Italy as the Mother of the Old Masters, such as Titian, Rafael, and Michael Angelo, but as the still fecund matron who, in modern times, has brought forth Galvani, Volta, and Marconi.

So important is the role played by the college in national life that there is no more profound and vital question for the statesman and the scholar than this: "What is the effect of an educational system upon the national character and the national institutions?"

The World War furnished us many interesting revelations of the influence of the different systems of education upon the peoples engaged in it and upon their political and social organization. The excellence of German education, no less than its universality, was formerly very generally

admitted even by those who later were the enemies of that Empire. More than a half century ago, Lord Palmerston sneered at "the land of damned professors;" but Englishmen, like former Ambassador James Bryce, better qualified than he to pass judgment in this respect, praised it very highly in ante-bellum days. At that time, the German university was a fetich for the world's scholars; but even then there were some critics, severe although not unkind, most notable, perhaps, being Mr. Price Collier in his book "Germany of the Germans." Even the German Chancellor, von Bethman-Hollweg, a few years before the war, publicly expressed his misgivings about the soundness of the German system of education.

Let us glance at that system as it existed at the outbreak of the awful struggle in 1914. Compulsory common school education had been inaugurated in Prussia as early as 1717, two hundred years previously, and the system had been continuously maintained and extended until it affected all children between five and fourteen years of age. There were also what were called compulsory continuation schools for those between fourteen and seventeen years of age whose circumstances compelled them to work, yet, who, under this system, received supplementary instruction for a certain number of hours each week. The result was that nowhere else was illiteracy so small, the percentage being so infinitesimal as to be negligible. Secondary education had been no less well provided for; and technical, vocational, commercial and professional schools of all grades abounded and the attendance was very large. But it was the universities with their great student bodies, their large faculties with world-wide reputation for learning, their varied courses, their thoroughness of research, their opportunities for specialization, their attention to applied as well as theoretical science, which shaped and directed modern Germany and made it what it was on that day when it hurled its iron might upon defenseless Belgium. In no country were the people better educated. Nowhere were there more experts in all the occupations of life. Practically every German was a specialist, an intensive specialist. The degree to which specialization had been carried in its universities is well illustrated by the story of the professor of Latin, who, at the close of a long life devoted to the study of the noun, expressed the keenest regret that he had not confined himself to the ablative absolute.

The German educational system also concerned itself very largely with commerce and business, especially administration, co-operation and co-ordination. The effect was apparent in the way in which that country was able for so long a time during the war to husband its limited resources and defy the whole world.

Another distinctive feature of its education, from the primary school to the university, was the extent and the spirit of its teaching of its own history, its "Kultur" and the means of attaining its racial and national aspirations. Patriotism was its religion. The glory of the country, the greatness of its ruler and the superiority of its people were preached day in and day out. The achievement of what was regarded as its future destiny was the purpose of all its instruction. The ideals and ideas even of the masses were traceable to the lectures and writings of the professors of history in the universities. Probably no teacher ever influenced a nation's political thinking as Treitschke did. He was the incarnation of the Prussian spirit. Oddly enough he was Slavonic by race rather than Teutonic, and Saxon, not Prussian, by birth; but he was thoroughly Prussianized. He had become intoxicated from the cup of Bismarck's power and he had passed the poison on to all his countrymen.

Very different from the system of the German universities was that of the English. The latter, in general, offered a prescribed uniform course for all students. It proceeded upon two assumptions which are in the main correct, namely: that every normal man has by nature many faculties, talents and tastes, each more or less active, and that each of them should receive some development in order that his association with other men may be agreeable and helpful; secondly, that all branches of knowledge are interrelated and that some knowledge of each of the more important ones and of the bearing of each upon the others, is essential in order to obtain a perfect understanding of any one branch. This system is frequently spoken of as individualistic, since it is the attempt to perfect or develop the individual. The statement of the purpose is correct, but in reality this system gives no heed to what is peculiar or personal in the individual in the matter of tastes and talent. It aims only at an average and applies only one standard. All are run through the same mold and become more or less of one type. A general course of study may to a certain extent

help to stimulate a faculty not normally active; but even here, since the course is uniform and makes no allowance for the varying degrees of deficiency of development, it fails to produce the model of its type. If the proper end of education be to develop the perfect all-around man it would seem that we all ought to specialize, not, however, in that in which we excel but in that in which we are deficient. Nevertheless the man who has taken the general rather than the specialized course of study does get some training in many lines and undoubtedly receives a preparation which enables him to profit greatly by his subsequent special training. Considering the value of his education merely from the economic standpoint, he is more self-sufficient, more self-reliant, and in a sense more independent. Such an education is ideal and in fact indispensable in an individualistic world or state or community. Even in a highly organized society it is helpful to the extent that men must help themselves. This system of education is not only adapted to the requirements of people among whom the individualistic principle prevails but it also tends to foster it and to shape their institutions and organizations according to it. It is the natural system of education where the doctrine of personal liberty exists, and speaking generally it is repugnant to the idea of strong centralized government. In the public service, it is, perhaps, the best preparation for the work of legislation, which essentially is a compromise of many opinions. Possibly it is also the best preparation for the work of the judicial tribunal and of the diplomatic service, where a knowledge of men and their temperaments is requisite. In itself, it is not a sufficient preparation for administrative work. In the political organization of a state whose people have been thus educated, the unifying element is the sympathy that exists, due to the similarity of ideas and ideals.

Specialization, which is the characteristic of German education, does not seek to perfect the man as a whole, but as a part of the community. It does not fit him for independent individual activity, but it does make him more efficient when co-operating with others. The more that he devotes himself to one thing, the less well he can do other things and the greater becomes his dependence upon others. He will have more need of them, yet less in common with them. But just in the proportion that he can do something better than others, they in turn become dependent upon him.

Dependent is thus able to demand the co-operation of dependent, and paradoxical as it may seem their mutual interdependence gives them collectively more liberty of action and freedom of development than would political independence of each other, because our most imperious masters are not our political rulers but our physical wants. The nation whose people have been educated under a system of specialization naturally becomes more compactly united. In the political organization of this people the unifying element is their mutual needs fortified, it may be, by gratitude and loyalty to those who have created the organization and by pride in it and love for it. A nation whose education has been specialized is also almost certainly if not necessarily, very much stronger industrially. While there may be a certain degree of weakening of individual initiative, this trait will survive in very many of the inhabitants, and any lessening of it will be more than counterbalanced by the extra skill of all the people which results from training. Such a nation is an aggregation of those who have developed to the utmost their strongest faculties.

In a nation of many millions of inhabitants, such is the variety of talents and tastes among men that special training of each in what he can do best means that every faculty and every talent found in man is developed to the highest degree in great numbers of men. And the very weakness of each one in the thing in which he has not specialized strengthens the spirit of unity amongst them, for since each cannot do everything all are forced to act together. Co-operation rather than individualism inevitably becomes the principle of their activities. Centralization of power of control and direction is no less certain, for without it co-operation is not successful. Leaders are needed, and the training of leaders becomes a specialty. The effect of this specialization upon industry and upon government are unity of purpose and plan, directness of action, saving of energy, and a resultant efficiency which is impossible where each individual is an average good all-round man, less dependent upon others, less willing and less obliged to co-operate, and less submissive to control and direction.

Specialization unquestionably has a certain tendency to bring into being and to build up the co-operative state, that which is popularly called the socialistic state.—one in which the power of the state is exerted in industrial and social matters, in behalf of the people to do for them that which

Americans and English generally consider should be done by those individuals who are directly interested. That has been the tendency of German education. No one will question that under the old regime Germany was an autocracy despite many specious limitations of the Imperial Constitution; yet when the Kaiser's power was at its height, Germany was a co-operative state, more nearly socialistic than any other great independent nation. Evidences of this were its social and industrial legislation dating back about thirty years, securing pensions for the aged, the sick and the unemployed, and its extensive application of the principle of municipal ownership.

What will be the ultimate effect upon the organization of the state if specialization in education goes on? Does specialization necessarily mean the substitution of the socialistic state for the individualistic state? Is it possible to secure the benefits of specialization without incurring political evils? Can there be a co-operative industrial system in a country without its shaping the political organization along similar lines? It is impossible to overlook the steady growth of co-operative government, that is, of governmental participation in industry, in countries that long boasted of their adherence to the principle of individualism. The legislation of Great Britain for two decades has been a series of surrenders by individualism.

It is hard to conceive of the abandonment of the principle of the division of labor, for it seems to have a sound economic basis; yet division of labor means specialization; specialization necessitates co-operation, and co-operation requires centralization of control. All three of these things must concur, otherwise the purpose of the division of labor, namely increased productiveness, is not accomplished. The economic limitation to the process of sub-division is, of course, the point where the labor of co-ordination and supervision, which division and sub-division necessitate costs more than it saves. But where is this point? As administrative skill seems to increase with every new division, the point to which I have referred, constantly recedes as we approach it. Economically, therefore, it is impossible to set a definite limit.

But there are other things in life than the material. And even if we grant that there is no profitable limit to sub-division and specialization we must nevertheless ask ourselves this question: "What are their social effects?" Do

they dwarf life and destroy personality? Do they make man a machine? If so, we must fix limits even although they appear to be arbitrary; for it profiteth a man nothing if he gain the whole world and yet lose his own soul. On the other hand it would seem that any system, which enables man with less effort and in less time to provide for his physical wants, must give him more means and more leisure for the cultivation of the mental and spiritual. The real problem is to keep him from creating new wants as fast as he devises methods for satisfying those already existing. The remedy is, amidst the material to proclaim the idea of the spiritual as something higher and better to which the material should minister. This is the most important work of the college as well as of the church today. All in all, I firmly believe that the mass of mankind is nobler in thought, nearer the Divine, less sordid and less brutish, than in the days of primitive labor, and that every improvement in industry makes possible an advance in civilization.

Technical education may be regarded as one phase of specialization. The excellence of the work along these lines in Germany before the war was universally admitted. Technical schools of all grades, from manual training schools for the young to Institutes of Technology of university rank and equipment, abounded. The effect of technical education upon the character is in many respects unquestionably helpful. There is a definiteness of purpose when one studies subjects that fit him for the practical tasks of life; there is a reality and vitality in them that call forth enthusiastic and genuine effort. There is a sincerity and earnestness in the study of these things which is often lacking when abstract subjects are perfunctorily studied and learned superficially with the feeling that they will never be serviceable and that they will soon be forgotten. The latter evils are a frequent, though not inevitable, incident of much of the study of the classics in our American colleges. There is a measure of danger that excessive devotion to technical subjects will make one materialistic in thought. Constantly dealing with things and the cost of their production and the profit to be derived from their sale, there is a certain tendency to make money the goal. This evil is no more a certain result of technical study than insincerity is a necessary incident of classical study. Yet in both cases the evils that I have mentioned are frequent

incidents. I do not oppose technical education; on the contrary I favor it, for I believe that one who does his work badly may be quite as materialistic as one who does it skillfully. The important thing is to inspire the worker with the feeling that there is something in life higher than the amassing of wealth. The whole world has arraigned Germany for having been thoroughly materialistic; and she has pleaded guilty. Her own preachers strongly inveighed against this evil in her life; but it was an evil by no means limited to that country. We of the United States, have often been charged with being worshippers of the almighty dollar. Nevertheless I feel that Germany unquestionably was the chief of sinners in this respect and that her system of education and her devotion to commerce and industry made her forget the earlier idealism which characterized her life.

Germany's attempt to inculcate patriotism in all her institutions, educational, social, political and military, is worthy of serious consideration at a time when the world is stirred with a new born feeling of nationalism; for we have a strong revival of nationalism in the world despite efforts towards internationalization. The virtue of patriotism, in Germany, was exaggerated and distorted. A false idea of the State and its nature was taught by its professors. The theory of sovereignty was developed by them into a denial of all responsibility by the State and a repudiation of all obligations inconsistent with its interests. Had German professors not taught that Deutschland was above everything, that once proud nation would not have fallen so low. Nations must recognize that above and paramount to them is a law governing their relations and that to it obedience is morally and legally due. Doubtless individual citizens and subjects must ever look up to their own nation as supreme and absolutely sovereign over them. The duty of obedience to government and the love of country must be more and more preached and practiced, but the events of recent years show how much every person owes it to his country to influence its policy and conduct so as to cause the recognition and observance by it of the rights of other nations. This does not mean that we should subordinate our own nation to others. It means exactly the contrary; that we should recognize them as free and equal. I believe in the independence of nations. I am opposed to the League of Nations as presented to the Senate

by President Wilson. It is a snare and delusion; a repudiation of international law; the confirmation of political intrigue; the destruction of the equality of States; the enthronement of imperialism; the violation of the American conscience; the endorsement of treachery towards one of our Allies and the approval of treaty provisions which are inconsistent with the principles that we declared upon entering the war, and which are inimical to permanent peace.

But the more a nation is independent, the more it is incumbent upon it to teach its citizens to respect the rights of other nations. It should insist on the allegiance of its citizens and it should foster love of country; but it should also teach the obligations that we owe to citizens of other countries and should promote love of humanity. True patriotism prompts the desire that one's country should be righteous as well as strong. We hear much of Americanism and the necessity of stimulating it. What is Americanism? The late Senator Hoar, an American of New England stock belonging to one of the families longest resident in this country, uttered a wise counsel as well as a noble sentiment when he said: "May I never place my country's interest above my country's honor." For nearly a century, we Americans have proudly repeated Commodore Decatur's famous toast: "Our Country, may she ever be in the right; but our Country, whether right or wrong!" Practically the individual citizen must ever act upon this principle, for the will and the opinion of one cannot in such matters be paramount to that of the majority.

There is, however, another sentiment, not inconsistent with Decatur's but complementary to it, which should also guide us in all our conduct. It found expression in the words of Carl Schurz, a naturalized American, who served this country faithfully and efficiently on battlefield, in diplomatic post, Cabinet council, and Senate chamber, and who was one of the most helpful and healthful influences in the reform of our political methods. His words were: "Our Country, may she ever be in the right; but if she is not in the right, it is our duty to set her right."

Personally I believe all genuine lovers of their country will admit that while we must detest those who merely expose their country's faults without effort to correct them, we must cease to regard as patriots only those who laud and praise their country and who seek to justify it in what-

ever it does. We must realize that those who strive to correct national faults are really the ones who are making their country better. It is, however, also incumbent upon us, and at this moment, in my opinion, is of supreme importance, that we rightly estimate the virtues of our country, the value of its institutions, the advantages of our form of government and the blessings of the Constitution under which we live; that we cultivate respect and love for all these things; that from press, pulpit, platform and parlor, school and shop, factory and field, we proclaim the essential soundness of our political and social principles and our absolute need of them to secure individual liberty and public order; that, in this way, we combat the errors of those who disparage or discredit them in word and thought; that we punish those who, by violence, seek to overthrow them; and that we put in restraint those who counsel the use of force instead of the appeal to reason in order to bring about changes in government.

It is also necessary that we do not under value our independence, nor forget the blessings it has conferred upon other nations as well as upon our own. The need of the hour is to develop both the American conscience and the American consciousness, and then to see that America acts in accordance with the dictates of her conscience and her judgment; that in foreign affairs she is neither controlled or hampered by covenants with other nations, many of whose recently revealed secret treaties and whose international acts have been such as not to justify her in accepting them as keepers of her conscience or as arbiters of her destiny; and that in domestic matters her highest aim shall ever be to give to all her citizens a fair and equal opportunity for the fullest personal development and the attainment of the highest happiness.

Another feature of German university education which deserves our attention because of its effect upon national character, is the lack of what we call college life, the want of college loyalty. The absence of the latter is largely due to the fact that few German students take their complete course at one university. Frequently they go for one year to a university whose corps life they wish to enjoy, then for another year or two to one whose professors are pre-eminent in certain studies which they wish to pursue, then for a final year to another university where other studies are supposedly better taught. The teaching staffs

of German universities before the war never sought to develop character. Whatever was done in this way was by the student organizations called corps, which in many respects resemble American college fraternities. With some cherished traditions and highly prized associations they influenced those who belonged to them but their membership being limited in number they did not directly affect all the students. They were aristocratic rather than democratic; they tended to divide the student body into small groups with special interests rather than to consolidate it into a unit with a common spirit. Moreover the German university does not have annual classes such as we have in America; the comradeship of classmate is unknown. There are generally speaking no college sports, no organized university social activities. The evil incident to the excessive attention to these matters in American colleges is admitted by all; but when they are properly controlled the good resulting from them far outweighs the evil. The difference between the average age of the student bodies in America and Germany necessitates, it is true, different forms of associations and methods. Yet, all in all, one is forced to the conclusion that the entire absence of the features of college life that I have mentioned has a certain tendency to prevent the development of the sense of fellowship, the human sympathy, the tact, the habit of mutual give-and-take, the ability to understand others, which are so absolutely essential to men in a world of men. One is constrained to believe that this is probably one of the causes of the failure of Germany's leaders to understand the psychology of others and to be understood by them, although we must remember that even the Kaiser himself attempted to increase acquaintance between the scholars of his country and our own by his encouragement of exchange professorships.

Incidentally I have already spoken somewhat of features of English university life. A brief specific reference to it is, however, necessary to a comprehensive treatment of my subject. I feel that I cannot do better than to quote from former Ambassador Bryce, so long the Regius Professor in Civil Law at Oxford. Perhaps before giving you his enthusiastic words of praise of the universities of his own land, I ought to acquit him of the charge that may possibly be preferred against him of being prejudiced, by saying that no person before the war more highly praised the amplitude of the provision for instruction in German

universities, the learning of their professors, the completeness with which their teaching was brought to bear upon every department of practical life, and the value for this purpose of the full knowledge and the exact training given by them. Comparing England's universities with them, he wrote:

"Although the great scientific discoveries of the last century are due to Englishmen, in recent years these universities have not contributed to original research either in natural science or humanistic subjects as have those of Germany. Less completely organized for the purposes of instruction, they educate a smaller proportion of the population. Since the Reformation they have been for the most part places of resort for the upper and middle classes, and it is only within the last thirty years that they have been rendered easily accessible to the promising and diligent youth of the poorer sections of society. But they have had conspicuous merits. The ideal is not to fit a man for a particular walk in life but to give a general education which will fit him to be a worthy member of church and commonwealth. They have sought to develop men as men, to create or develop the well-rounded and harmonious character, one of symmetrical completeness. In aiming at this they have thought not only of learning or the powers of the speculative intellect, but also of the aptitudes which find their scope in practical life, and which enable a man to work usefully with other men and to exercise a wholesome influence in the community. They have long been associated with the public life of England, and the graduates of each of them gratefully acknowledge their indebtedness to their *alma mater*. The debt is not so much the knowledge acquired or even the power of public speaking. It is, perhaps, rather the knowledge of human nature, the tact and judgment, the sense of honor and comradeship, which daily social intercourse in the colleges tends to form, the result of the domestic life which brings the students close together. The undergraduates dine together in the same hall with the graduates, worship at the same chapel, have their sports together. They form friendships and learn as much from each other as from their teachers. There is an easy and familiar intercourse between the stu-

dents and the teachers, especially the younger teachers. There is what we call an atmosphere, that intellectual and social tone which forms manners and refines tastes and strengthens characters by traditions inherited from a long and splendid past."

This was said several years before the war. How nobly during that awful struggle the academicians of Oxford and Cambridge conducted themselves. How eagerly they offered their lives for their country. At the first bugle's blast these classic halls were emptied. The University men were among the very first of all Englishmen to give proof of patriotic feelings; and they "carried on." The lack of scientific training at times put them to some disadvantage, but idealism and initiative gave them the will to dare and the power to conceive.

It is somewhat difficult to generalize as to American institutions of higher learning, so numerous are they, so varied in type, so different in their methods as well as in their environment. Yet as a rule, they all have a distinctive American college life. In every one of them, however numerous the courses of study and however complete the equipment, the association of students with each other in class and in fraternity and the sense of filial relationship to the college are considered to be amongst the most powerful factors in the training of their minds as well as in the development of their characters. The life of almost every American College is such that the institution becomes to the student a living thing, the object of affection and endearment. Little though it be, it is loved, to paraphrase Daniel Webster's famous utterance in the Dartmouth College case. The college becomes the "*Alma Mater*," the dear old mother. Thus the sweetest of words are used to express, and the strongest of all human ties are used to symbolize, the most endearing and the most enduring of the influences to which youth is subjected. I remember that when I was an undergraduate at Hamilton College, an alumnus who recognized the universality of this sentiment which regards the college as "dear mother," but who questioned its value, offered a prize for the best poem on college life which would not contain the words "*Alma Mater*." This man was wrong in his evaluations. Our symbols often stand for that which is most real in our lives; our metaphors frequently are the clearest expression of our true feelings.

"*Alma Mater*" is the epitome of American college life. It gathers within itself all the ideas of fraternity and society, of class comradeship and college spirit—all of obligation and duty, of affection and devotion. It is akin to the idea that native land is "mother-country." Patriotism is nothing but the full flower of it. It was Horace, the poet whom every college man reads, who said: "*Dulce et decorum est pro patria mori.*" It is not strange that the spirit of patriotism was exemplified in the late war so whole-heartedly, so self-sacrificingly, by millions of men, but by none with more spontaneity, more zeal, and more fortitude, than the thousands who went out from college walls, bidding good-bye to *alma mater*, and singing as their dedicatory hymn to Mother Country:

"Common mother of us all,
Our hearts, our hopes, our prayers, our tears,
Our faith, triumphant o'er our fears,
Are all with thee, are all with thee."

Today the War is over so far as armed strife is concerned. Great as were the struggles and sacrifices of the contest they called for no more strength or effort than do the mighty tasks which we must undertake today. The marshalling of our military forces, the planning of our campaigns, the winning of victory for us and our Allies, necessitated no greater talent or training nor any higher degree of courage or fortitude, than does the great work of reorganization and reconstruction. Not only have we gigantic physical tasks to perform in repairing vast districts that have been devastated, in reviving industries and in re-establishing commerce, but we also have political and social problems that are at once profound and perplexing. It is frequently said that we live in a New World. That statement is, however, full of error, and those who base their plans for reorganization upon it are foolish. They will fall into such an abyss that they will very greatly doubt whether they are living in the World. I need not specify what the name of the abyss is, except to say that disillusioned optimists will realize that it is not Heaven. We may as well face the facts. To do so is not to be cynical; it is merely to be sensible. Since the war, as before it, we live in a very old world—as old as the temptation of Eve, the fall of Adam and the killing of Abel by his brother—an old world in which there still dwells that oldest of

citizens, Mr. "Old Man of the Flesh." Beyond question the war stimulated spiritual life; but it also stirred up bestial passions and it engendered new hatreds and rivalries. We must appeal to the best in men; we must steadily strive to make men better; but if we forget that there is still much evil in men and in groups of men—classes, masses, nations and races—we will merely make the best of men the victims of evil men.

We do, however, live in a greatly changed world,—one in which races have been thrown into unheard-of relations with each other, in which nations have been hurled down and other nations built up, in which class consciousness has been immensely increased, in which customs and habits and institutions and constitutions have been much altered.

Not only do we live in a changed world, but in a changing one,—a world in a condition of unrest, topsy-turvy, in a whirl, dizzy and dazed. The changes that have been made and those that are being advocated present to mankind problems such as never before tested its mental and spiritual strength. Many visionary schemes have been proposed, many pernicious suggestions have been made, many fallacious theories are being advanced; on the other hand there have been some honestly conceived plans and some widely considered proposals. Great are our perils but great also are our possibilities. We cannot shut our eyes to the fact that if we are not to wander into paths which may lead us into bottomless pits, if on the other hand we are not to fall short of the very mountain tops of human attainment whence we may look over into The Promised Land, we need to walk, with the lamp of experience for our feet, with the light of reason shining in our face and with the star of hope guiding us onward. To select the true, to reject the false, to hold fast to that which has proved to be good, to seek nothing in its place until it gives sure promise of being better, to adapt ourselves to conditions that have actually changed, to create new agencies if really needed, and to fit ourselves individually and collectively for the work at hand,—this is the great task of mankind. It will require all the stored-up wisdom of the ages and all the intelligence of open, active and liberal minds. It will necessitate a general extension of education, a far wider diffusion of knowledge, a learning broader in its scope and more profound in its research.

Here in the United States as well as in practically every other nation of the world, these complex problems are to be solved by democracies. Millions of men, and also millions of women who have not hitherto participated in the direction of government, either directly or through their chosen representatives, are to work out the answers to these questions that so vitally affect all mankind. The masses, not the select few, are to be responsible for the principles which will be followed and the policies which will be adopted. How great the need of universal popular education of the highest type and of the most varied character! How absolute the demand for the development of the character of every individual citizen! More than ever he is to be a ruler. He must have the training of the ruler, or democracy fails and with it our hopes.

In the War we learned the lesson of military preparedness, perhaps not all the lesson. No less important is preparedness in and for peace. The peoples of the World must prepare themselves for the tremendous tasks that lie immediately ahead of them. Great results are obtained only by the nations that think beforehand, determine in advance their policies, equip themselves for carrying them into execution. Nine-tenths of wisdom, it has been said, consists in being wise in time. The demand of the world in every field of activity is for such previous preparation as will ensure efficient action at the instant that action is required. Nowhere more than in England and the United States was there greater need of a revision of ideas as to the need of special training or preparation for given tasks. England, long the leader in industry, long in possession of the markets of the world, had before the war become self-satisfied and unwilling to learn new methods. She had neglected vocational and technical training until the markets of the world were slipping from her grasp and her maritime supremacy was threatened. We, of America, for many years, had succeeded and prospered because of the marvelous richness of our resources and the multiplicity of our opportunities and the lack of keen competition from abroad. We boasted of American adaptability, of our ability to do anything to which our hand turned. We fancied that any of us could do anything sufficiently well without any previous training. Perhaps the most distrustful of our countrymen as to this universal capability was the one in the story who, when asked if he could play the piano, answered: "I do not know, I never tried." World

competition and the challenge of the great war have altered our views and we realize now the need of special training for every task, the necessity of systematic study under skilled and experienced teachers. The people, therefore, are making increased demands upon their colleges and universities.

Our intellectual horizon has widened immensely as a result of the war. Our curricula must everywhere, in colleges as well as in universities, be modified. In the latter, at least, they must be amplified. Our new international relations necessitate a much more universal and more complete knowledge of international law and international polity and of the history of other nations wherein we find revealed that which more and more must become a developed science, international psychology. Changed commercial conditions demand that many more of us learn foreign languages, be acquainted with foreign customs, have a more extended knowledge of the political and physical geography of all the nations of the world and of the resources and needs of each. Now that nations are the virtual competitors in the world's markets, how increasingly important has become the study of political economy and of international finance and exchange. How essential, too, because of the keenness of competition, is thorough training in every one of the sciences that are applicable to industrial production as well as all those that relate to business organization, commercial methods and accounting. Considering the numerous questions as to the relations of classes and masses, was there ever a time in all mankind's progress when sociology should be studied more profoundly, more honestly, more universally? Was there ever a moment requiring greater vigilance in watching every development and change in our constitutional system and in grounding ourselves in the principles of government? With the tremendous increase of official functions, does not the science of government, especially of administrative government, take on an importance hard to overestimate? In an age when races of the most widely differing characteristics are being thrown together intimately, can ethnology remain only the diversion of the dilettante? With the strange revelation which the war gave of man's nobility of soul even in the midst of fiendish brutality, should not the spiritual be a field of study and of scientific inquiry of the greatest importance and the greatest interest? Should not moral and mental philosophy, ethics and religion be more

and more studied? In fact as men come closer together and the corners of the earth are brought nearer to each other, must not every educated man say, as did the Roman poet: "Nothing that affects mankind is foreign to me?"

In the last quarter of the last century the changed conception of the mission of the institutions of higher learning in a democracy, gave birth to the university extension movement. The University went to the people. It established lecture bureaus and correspondence classes. Public forums were opened; popular discussion was encouraged. Social centers were created; libraries were put in circulation. Summer courses as well as night schools were inaugurated; college credits were given to those who attended regularly and passed the prescribed examinations. In this way most of the Universities and many of the colleges have been, and are today, endeavoring to raise the standard of the masses and to prepare them for their duties. Of course there are dangers in the extension movement. There is the possibility of superficiality and of getting, as has been said, "the second-rate second-hand." There are many institutions where the limitations upon successful work of this kind are very great. As a rule State universities can best do it; but speaking generally, with the increase of democracy's duties the need becomes more imperative for every institution to try to fit all within its radius of action for the discharge of those duties. It must seek facilities to expand its work within its walls and to extend extramurally.

Can our institutions of higher learning meet the new demands of the times? I feel sure that they can and that they will. It will, however, be necessary for them to appreciate not only the magnitude of the task but also its variety. Everywhere facilities will have to be increased, equipment perfected, and above all a decent standard of salaries fixed for the teaching and administrative staffs. Great as is the work, it does not call for the establishment of new colleges. There are over six hundred in the United States now. The strengthening of those that exist is the need. In undertaking to do this we must consider the differences in the conditions in the various colleges, the variety of the educational needs of the country and particularly the special requirements of the locality or constituency which each one is under obligation to serve. Each institution of higher learning should determine the radius of its activity and the scope of its work, and then equip itself thoroughly.

I am one of those who believe that there is a place for the great university and also for the small college, and that our educational system will be perfected when the two types co-ordinate their work. The larger portion of the young men and women of the country have neither the financial means nor the inclination to take strictly cultural courses. As the democratic idea spreads, the universities will more and more feel it to be their duty to do what they can to broaden the lives and develop the minds of all who can be reached and to fit them for the practical duties of life, rather than to give the highest culture to the comparative few. Those universities which are supported by the States and perhaps others which are richly endowed, will continue to offer courses in most of the subjects of learning and to give great freedom to students in their choice of studies. Yet where they are not sustained by the taxing-power of the state, I believe that even the great universities will cease to attempt to teach everything and that in higher studies, where students are comparatively few, they will avoid unnecessary duplication of work and each will confine itself to teaching that which it can teach best by reason of its equipment or its location.

The World, it is said, has been made safe for democracy. But in this year of its triumph democracy faces its greatest trial. It has to demonstrate that it, itself, is safe for the World. In our thoughts about democracy we are too prone to consider only the first part of the word, the "*demos*," the people, the multitude, mass action. We forget that the second part of the word, the "*cracy*," states its essential meaning and sets forth the true purpose of democracy, namely to rule, to govern, to direct. The greatest need of mankind today is wise leadership. Without this, democracy is anarchy. That leadership must be representative and not personal, with a division and not a centralization of power; otherwise democracy lapses into absolutism. The highest function of institutions of learning today is to teach respect for law and for legally established authority, to instill into the minds of the people a conception of the necessity of leadership as well as to train as leaders those who have the necessary natural capacity. In my opinion this is a field of work in which the American college as distinguished from the university,—the small college—can render specially valuable services. The training of leaders requires, today as never before, education in those subjects which

the small colleges have taught in the past and for the broader teaching of which they can, with comparative ease, secure additional facilities.

It is frequently said that the education of the future must relate more to the physical and applied sciences, that instruction in them is necessary to triumph in war as well as to win in the industrial competition that exists today. We realize that every man must specialize and train the faculty in which by nature he excels. Yet the late Great War itself and the things that led up to it show that education is needed in other things than the physical sciences. In fact, that universal struggle was a fight against misapplied science and in particular against perverted material science. There is need, now more than ever, of education in political and moral sciences, in philosophy and psychology, in history, in the humanities. The war taught us that morale is as essential to military success as machines; it revealed to us the strength of the spirit as well as of the sword; it taught us that nations have souls no less than the individuals which compose them. Therefore all the studies that I have just mentioned have become of added importance to us. In the rendering of this great service to humanity I know of no better agency than the small college,—institutions, like Hobart, seeking to do not much but to do thoroughly what they attempt to do, institutions endowed with high ideals, rich in glorious traditions, free from state control, supported, however, by men of public spirit, officered by men of unselfish devotion, attended by students of lofty purpose and noble aims. This historic college so charmingly situated on the shores of Seneca Lake,—this college, venerable yet virile—can, I am sure, look forward to a future of ever-increasing usefulness, developing in the main along the old lines, expanding and broadening but never spreading out thin, giving the general education rather than the special, the cultural rather than the professional.

The field of educational work is, indeed, immense; the opportunities are infinite. In these dark days when we seek to solve the problems that loom up so portentous,—the readjustment of international relations, the reconstruction of the world, the reconciliation of the conflicting claims of capital and labor, the adaptation of old methods and institutions to new conditions, the realization of democracy's great mission, the preservation of the fundamental prin-

ciples of social and political welfare,—it is to the colleges and the universities that the people turn as to beacons of light. They are not only agencies of democracy, but examples of it, for they help men by teaching them how to help themselves. The world today looks to its college-men for the spirit of progress born of the knowledge that constantly seeks better things; for the spirit of conservatism born of the wisdom derived from the lessons of the past that warn against rash experiments and hasty expedients; and finally for the spirit of truth, the ceaseless striving for the real and the eternal.

Nothing is more needed today than that conscientious search for the truth and that fearless expression of it which characterize true academic freedom. Thorough as, in many respects, was the work done in the German universities, we now see that governmental control of them,—the repression of the truth and the warped statement of historical and philosophical doctrine under official pressure or inducement,—was one of the greatest evils from which that nation suffered and one of the most potent causes of the recent world catastrophe. That America's educational system may not fall into this danger but that she may ever have a great number of colleges free from all political domination is our earnest prayer. This search for the truth is, indeed, the purpose of all education; it is the goal of all human endeavor. If I were to give a motto to this college for its teachers and its students, it would be those fine words of one of the purest-minded patriots who ever came to this country: "Seek the truth without prejudice; speak the truth without fear." Were all the colleges to adopt this motto and all their sons and daughters to observe it, these institutions would become the most serviceable of all human agencies, solving the problems of these after-war days and so directing the minds of men that future wars would be avoided; and the future of humanity would be forever secure.

LIBERTY AND LAW.

An Address at the Annual Banquet of the School of Law
of George Washington University, April 13, 1920, by

WENDELL PHILLIPS STAFFORD,

Justice of the Supreme Court of the District of Columbia,
and Professor of Law in the George Washington
University.

MR. TOASTMASTER:

I am going to speak to you for a little while this evening on a very large subject, "Liberty and Law." Really it is the only subject upon which a lawyer ever can speak, because the whole history of law consists in nothing more than a series of adjustments between liberty and law. It makes no difference whether you are speaking of law in the narrow sense or in the broad sense. It makes no difference whether you are speaking of law in the sense in which we lawyers use it or in the sense in which it is used by scientists, philosophers and theologians. The proposition holds good just the same. Let us see if it is not so. Suppose we begin with the mineral and vegetable worlds. Does any man question that here everything is governed and directed by law? There is no such thing as liberty in these worlds. The will of the Father is supreme and unresisted. Law rules. In the purely animal world it is essentially the same. What we call instinct is only the manifestation of the Father's will. It is only the operation of law. The beast obeys, but he does it blindly and instinctively, not as a matter of choice. In these lower worlds we have no conflict between liberty and law because it is all law. Conflict there is, of course—chemical conflict, conflict in the vegetable world, plant crowding out plant, plant living upon plant; conflict in the animal world—fierce, unceasing conflict, species preying upon species—yet always in obedience to law, never in opposition to it. But when we come to man we find a new kind of conflict, a conflict with law—a conflict within himself. Of course he has also the same kind of conflict that the animals have, with things outside him. But he has a fiercer conflict still inside. Because he found out, at a certain stage of his existence, that he could disobey the Father if he chose. He could make a law for himself and could defy the law that was laid upon him from above. And he did it. Then began a conflict that has lasted ever since. We call him a free agent, and yet he is hedged about by certain laws which he must obey

if he would live at all. He must eat and drink or he will die. He must look out for the fire or he will be burned. He must look out for the water or he will be drowned. He is almost completely surrounded by barriers of law that he simply cannot pass over. Little by little he learns what these are and he obeys them because he sees that the price of disobedience is more than he can afford to pay. The wages of sin is literally death. There are other laws that are no less real, and carry penalties no less deadly, but these he does not understand as yet. He has heard them with his ears but he has not taken them to heart, and he is ready to run the risk of disobeying these. The punishment comes in course of time but it may be so long in coming that the connection is not perceived. Yet even in these cases the wages of sin is death. There is no case in which a law of God is disobeyed in which there does not follow the death of something akin to life. Something that would have lived if the law had been kept has ceased to live or has never come to birth because the law has been broken.

How is it now in societies of men? Here another agency is at work. Individual wills are striving and clashing with one another and there is no such conflict among the beasts of the field as there is among the superior beasts called men. But when we look at the matter closely we see that there is nothing new or different even here. It is the same old conflict between liberty and law. Here it is the law of the universe in conflict with the dictates of individual selfishness. For what is it that men are doing when they try to live together peacefully and helpfully, and to build up states and nations to that end? They are merely imitating the operations of nature, obeying the Father's will by attempting to live in harmony with the laws of His universe. They are seeking to bring unity out of diversity, harmony out of discord. As Browning wrote:

"A people is but the attempt of many
To rise to the completer life of one."

We see then a little of what Saint Paul meant when he said, "The powers that be are ordained of God." They were. The Roman State of Saint Paul's time was a marvel of human law, the admiration of the world to this day. And if you trace government back to the beginning you see even more clearly how inevitable and providential it all was. As men increased in numbers it became necessary that they should live more or less together, and only those societies

that followed certain lines of conduct could survive. The rest went to the wall or died out. For one thing the tribe that had the best leader or showed the best team work would be likely to get the better of the others and supplant them. And so the race entered upon that long road of social progress of which the end has not been reached even yet. It learned by hard knocks that men could not get along together unless they were willing to submit to some sort of control. They had to give up some of their individual liberty in order to live at all. It was a case of a half loaf being better than no bread. If each member of the tribe stood out by himself he stood a good chance of being killed off by the neighboring tribe. But if the whole tribe stood together, and especially if it picked out a bright, brave man for leader, they might all have a chance to live. And the same thing held true when the tribe had grown into the nation. And it held true as among the members of the tribe, just as it did as between the tribe itself and other tribes. For one member or one family might take more than belonged to it unless the tribe hung together and laid down a few rules that no individual and no family could be allowed to break. So just as man the individual found that in order to live and prosper he must lay upon himself certain rules of conduct, so man the social organism found that it must do the same. And every such rule represented a conquest of law over liberty. Yet it was in the interest of liberty after all. The liberty of the individual was sacrificed that the liberty of the tribe or the nation might be secured. It was an adjustment between liberty and law. If the law was a good law it was because it was made in the interest of the whole. If it was a bad law it was because it was made in the interest of a part—of a tyrant, or a family or a class.

Now where do we stand today in this course of development? In all the countries of the civilized world men see and acknowledge the necessity for law. In all the free countries they see and acknowledge that laws ought to be made in the interest of the whole. In all democratic countries they see and acknowledge that the laws ought to be made by the people themselves. We are in no danger now from any king or single despot of any sort. The danger in a democracy is that some faction or group may get control and make laws in its own interest, or interfere with the execution of the people's laws. This a minority can do if it happens to possess certain advantages over the majority. It may be more active or better organized or better led.

The people, the great majority, may be asleep or lazy or indifferent or uninformed or unorganized, or their representatives may be timid or even cowardly or at the best they may be unequal to their task. And so a mere minority may be allowed to flourish a club over the head of government itself. When things reach such a pass there is only one remedy left—a rousing call to the people themselves to take things into their own hands once more, to send all timid, time-serving, incompetent public servants home, and to call out the strong and fearless men, the upright and clear-headed men to take their place. Such men there are all through the land. They will come out if they are called, and when the crisis comes they will be called, they must be called, there is no other way. There is no royal road to safety. There is no chance or hope in a democracy unless we can trust the honest intelligence of the millions in a time like this. If we cannot build on that, we have nothing left to build on. Now it is right here that lawyers have a chance to be of some real use. They can analyze things. They can show the principles that are involved. They can point out the bounds of liberty and show where the duty of obedience has been broken. Every lawyer is bound, first of all, to think out such public questions for himself, earnestly, clearly and carefully, and then to give the public the benefit of his thinking. It cannot be expected that we shall all think alike, certainly not to start with, but we can never hope to think alike unless we all set about thinking, and think earnestly, clearly and carefully, and then tell our fellows what we think, and tell them with honesty and courage.

We have seen that in the lowest stages of existence law is supreme and unresisted; that in the world of human activity free will comes into play and there is perpetual conflict requiring adjustment after adjustment between liberty and law. But this is not the end. There is a third stage, and here once more the conflict ceases and law becomes supreme and unresisted. It is the stage in which the will bows freely to the law and performs it with a whole heart. In the individual that stage is reached when the heart accepts the will of God as revealed in Jesus Christ and desires nothing but to act in accordance with that will. As Tennyson sang with all reverence:

“Our wills are ours to make them Thine.”

That is the service that is perfect freedom. That is the glorious liberty of the children of God. It is real obedience.

It is not the involuntary obedience of the plant. It is not the blind obedience of the beast. It is not the slavish obedience of fear. It is the glad obedience of love, eager and swift to do the Father's will. But you say we cannot look for such an attitude as that towards any human law. Yet there have been times when we have seen something like that—times when the patriotic heart of the nation has beat in perfect unison with its law, and men have not asked what they *must* do for their country but only what they *could* do for their country. The ideal state is the devotion to law that obeys without a thought of penalty or compulsion—obeys the law out of pure love for the country whose voice the law is.

This university, this school of law, has a great treasure and inspiration in the name it is permitted to bear, the name of the Father of his Country. Before I sit down let me ask you for one moment to think of him. He won our independence for us. He secured for us a Constitution, the foundation of all our laws. We can face the future with confidence and gladness if only we can live true to the lessons we have learned from him.

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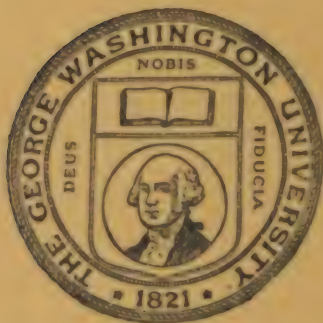
The Regular Annual Courses of the University for the
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MEDICAL NUMBER



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THE PHYSIOLOGIC PRINCIPLE IN THE TREATMENT OF DISEASE.

Presidential Address,
Delivered before the George Washington University Medical
Society, May 15, 1920.

WILLIAM J. MALLORY, A.M., M.D., F.A.C.P.,
Associate in Medicine.

All rational action is based upon a knowledge of the quality and properties of the object acted upon. So, the rational practice of medicine is based upon a scientific knowledge of structure and function, as well as the alterations that occur in these as a result of morbid changes. Therapeutics being an art applied to the prevention, cure, or alleviation of disease, the ideal goal to be aimed at is prophylaxis or, where this is not available, a specific treatment—removal of the exciting cause.

There are, however, a variety of morbid conditions which, as yet, are unpreventable, and in many instances, the result of causes which cannot be removed. For example, general impairments of health and individual deficiencies due to congenital conditions or disease long past. This is true especially of the so-called functional disturbances. These comprise, according to all authorities, the largest group of cases the physician is called upon to treat. Just as in organic disease a knowledge of structure, normal and abnormal, is essential, so to an even greater extent, in the functional disturbances is a knowledge of normal and abnormal physiology necessary. In other words, in order to produce a given effect the ideal method would be to influence the abnormal physiology by means of the mechanism which the body ordinarily uses to adapt itself to varying conditions of life. This I would call the physiologic principle in the treatment of disease.

This principle has long been recognized and applied in dealing with diseases of the circulatory system, and recently in the management and training of those suffering from nervous and mental diseases. I do not believe that it has received due con-

sideration in the treatment of gastro-intestinal diseases, and I therefore wish to point out its application to the treatment of motor disturbances of the gastro-intestinal tract. To this end I therefore wish to recall to you the normal physiology controlling this function.

The muscular system of the digestive tract is comparable to that of the heart, in that it is autonomous, that is, involuntary. Like the heart, it has three different nerve innervations: 1. The vagus or bulbar autonomic system. 2. The sympathetic system. These act in antagonism, in most cases, and normally hold each other in equilibrium. 3. In addition to these two sources of extrinsic innervation there is present an intrinsic nerve supply, consisting of the plexuses of Auerbach and Meissner, which is capable of acting adequately alone, even when all connection with the cerebro-spinal nervous system is severed.

The muscle tissue is also of three classes, each differing from the others in certain respects: 1. That forming the greater bulk, the circular and longitudinal muscle, developed from the mesenchyme and receiving innervation from both vagus and sympathetic nerves. 2. The sphincter muscle, found at the pylorus, ileocecal region, and anus, and which is peculiar in its embryonic origin and physiology. In early embryonic development, as the intestine grows from above down, it passes an accumulation of nonstriated fibers which eventually go to the skin and sub-dermal tissues. Part of this dermal muscular mass is picked up by the intestine and carried down with it, later to be found at the sphincters, the pylorus, the ileocecal region, and the internal anus. This sphincter muscle is largely independent; the vagus is said to have no influence on it, while irritation of the sympathetic nerve causes its contraction. 3. The neuro-muscular tissue, described by Keith, is found especially at the cardiac end of the stomach, pylorus, and ileocecal region. It is in close association with the plexus of Auerbach. This plexus or nerve net is considered by some as modified muscular tissue, developed from the mesenchyme and not derived from either the sympathetic or pneumogastric. It is analogous, if not similar to the nerve net of the heart, which is

connected with and activated by the sinu oricular node and the bundle of His, which we know stimulate the heart action through the Purkinje fibers. This myenteric net being partly nerve tissue and partly neuro-muscular tissue, and being indirectly connected with the nervous system, is completely autonomous. It is controlled to a certain extent and kept within bounds of action by the vagus on the one hand and by the sympathetic on the other, but most of the motor work of the intestine is performed under the control of this net.

Reduced to its simplest factors, the motor system of the digestive tract consists of a muscular tube with its own intrinsic, autonomous nervous system. Food, once introduced by the voluntary muscular action, is thereafter moved automatically until digestion and absorption are complete and the refuse ejected. This will occur even when all connection with the cerebro-spinal system is severed. This autonomic motor activity is modified normally and sometimes abnormally by extrinsic influences, coming through the vagus or sympathetic. Motor influences, especially for increasing tone and accelerating peristalsis, pass through the vagus nerve. These impulses are increased by exhilarating mental excitement and impaired by physical and mental exhaustion. Inhibitory influences reducing tone and retarding peristalsis pass principally, if not wholly, through the sympathetic nerve. These impulses are increased by mental depression and by the internal secretion of the adrenals. In any case of motor disturbance of the digestive tract it is important to determine whether there is a predominant action of the vagus or the sympathetic, or, briefly, whether the individual is of the vago-tonic or sympathico-tonic type. In this, as in any other syndrome, one does not always find a complete type, that is, one presenting all the symptoms and signs at one time; still, it is well to know all the symptoms and signs of each type.

The vago-tonic type will present some, though rarely all of the following features: Palpitation; precordial pain, with slight tachycardia; burning pains in the stomach; diarrhoea with sweating attacks, in spite of being chilly and having cold feet;

there is increased lachrymation; frequent nausea; the palpebral fissure is enlarged; there is slight exophthalmos; a clear von Graeffe's sign, without the sign of Mobius; low arterial tension; the over contracted pupils are not dilated by adrenalin, but they contract with expiration (that is, Samogyis' sign; on the administration of adrenalin alimentary glycosuria is produced; pilocarpine produces secretory crises; eosinophilia may be present; the dyspeptic symptoms are marvelously benefited by atropine. This last is especially true with regard to constipation.

With the sympathico-tonic type there is tachycardia, with few subjective symptoms; exophthalmos with no von Graeffes sign, but with a clear sign of Mobius; large pupils, and scanty lachrymal secretion; no sweats or diarrhoeas; pupil dilates with adrenalin; does not react to pilocarpine; and stands atropine badly.

A further test for the recognition of these conditions is the oculocardiac reflex, discovered by Aschner. The test is as follows: In the normal state, and in a recumbent position, pressure on the eyeballs with the pulp of the fingers softly for thirty seconds without pain determines after a lapse of a few seconds a slowing of the pulse, lowering of the arterial tension, slowing of the respiration, and sometimes a feeling of nausea. The reflex is *positive* when the slowing of the pulse rate is in excess of 12 beats per minute; it is *normal* when the slowing is at least 4, and less than 12 beats per minute; it is *negative* when there is no reaction, or one of less than 4 beats per minute; it is *inverted* when, without excitement or pain, the slowing of the pulse is replaced by acceleration. When the reflex is positive, one speaks of vago-tonia; when it is negative or inverted, of sympathico-tonia.

This physiological mechanism may be influenced by various endogenous and exogenous substances.

Exogenous substances which are of vago-trophic nature, that is, substances which affect the activity of the mesencephalic bulbar and sacral divisions of the autonomic system, include: 1. Poisons which paralyze the autonomic nerve endings. Atropin paralyzes the accelerator nerve, producing myd-

riasis and inhibition of sweating; nitrites paralyze the inhibitory nerves. 2. Poisons which stimulate the autonomic nerve endings (vagospastics). These are: Muscarin, pilocarpin, picrotoxin, and physostygmine. The last mentioned is distinguished from the others by the fact that its action is less a stimulating one and more a raising of the threshold of sensibility of the nerves. The physiological effect of these substances is decrease in blood pressure, weakening of cardiac action, slowing of the heart, narrowing of the pupil, increased glandular secretion, and spastic peristalsis in the gastro-intestinal tract. It is a noteworthy fact that it is only exceptionally that a substance has a universal action upon the autonomic system. Most of them have a selective action. Atropin has a powerful influence upon the cranial branches and little upon the sacral branches, while the nitrates influence the latter, in the main, but not the former. Pilocarpin has a strong selective action upon the secretory fibers.

Among the exogenous substances which are of sympathicotropic nature and which may change the irritability of the sympathetic system, may be mentioned: 1. Poisons which paralyze the sympathetic system. Ergotoxin has a strong selective action, paralyzing the accelerator nerve endings. 2. Poisons which stimulate the sympathetic system. Ephedrin stimulates the peripheral nerve endings of the sympathetic system, particularly the smooth muscle of the eyeball, the dilator muscle of the eyes, and of the orbit. Tetrahydronaphthylamin stimulates simultaneously the central and peripheral parts of the sympathetic.

Of great importance are the effects of endogenous or endocrine substances, which may be likewise divided into vagotonics and sympathico-tonics. Among the vago-tonic substances which stimulate the autonomic system must be mentioned cholin (oxethyltrimethylammonium hydroxide) which may be obtained in abundance from the cortex of the adrenals, and whose stimulating action upon the peripheral accelerator nerve endings of the autonomies is very similar to that of pilocarpin. It acts upon the vascular system and the pupil in antagonistic fashion to the other product of the adrenals, adrelanin.

Among the sympathico-tonic substances may be mentioned: Iodothyrene, hypophysin, and adrenalin. The first two stimulate parts of, and the last the entire sympathetic system. Iodothyrene or iodothyreoglobulin, in full dosage, will cause tachycardia, widening of the lid slits, exophthalmis, emaciation, sweating, and increased sensitiveness of the eye to adrenalin. Its action is selective, in that it excites, or makes more excitable, only the cervical and thoracic sympathetics.

Hypophysin, pituitrin, or pituglandol, the active principle of the infundibulum hypophysi, stimulates the lumbar sympathetics, especially the nerves to the bladder and uterus, and contraction of the intestines, when given in large doses.

Adrenalin acts even though the connection nerves from the central nervous system be divided. It stimulates the entire sympathetic. It produces in its accelerator nerves acceleration or increase in the functional activity of the organs which they supply, while in its inhibitory nerve it produces inhibition or decrease of function. In the gastro-intestinal tract it produces depression and an anaemic state, and increase of sphincter tonus.

Vagotonia occurs chiefly in youthful or middle-aged individuals, who are particularly subject to autonomic traumata, and who show either permanently or transiently one of the following manifestations: A positive reaction to the oculocardiac reflex of Achsner. A subcutaneous injection of one centigram (or one-seventh of a grain) of pilocarpin will reveal the existence of vagotonic symptoms which may give rise to no complaint on the part of the patient; or may change serious latent disturbances into manifestly acute conditions, such as tabetic crises, bronchial asthma, bradycardia, or angina pectoris, vasomotorious.

Atropin and adrenalin affect the symptoms and signs of over-activity of the autonomic nervous system favorably. Other symptoms of vagus irritability or vagotonia are hypersecretion and increased motor activity. They present themselves in various ways, such as intermittent gastrosuccorhea and hypersecretion with or without hyperacidity. These are sometimes associated with sphincter spasm, pylorospasm, and

subsequent antiperistalsis. The beneficial effect of atropin is thus of marked benefit in differentiating between pylorospasm and pyloric stenosis in the absence of other signs of motor insufficiency.

The diarrhea in vagotonia, in Graves' and Addison's diseases, have been claimed to be due to hyper-irritability of the vagus supply to the intestine, that is, to an increase of peristalsis and an increased serous transudation into its lumen. The beneficial effect of atropin subcutaneously and adrenal enemata seems to confirm this. The secretory neuroses have recently been included in the same group, enteritis membranacea or mucous colitis and eosinophilic rectal catarrh.

Closely related to cardiaspasm and pylorospasm are spastic constipation and spasm of rectal sphincter, both little understood conditions as far as pathogenesis is concerned.

In severe vagotonia there occasionally occur conditions of intense spasm in the smooth muscle of the gall bladder, gall duct, ureta, and bladder. Spasm of the gall bladder is said to cause spasm of the gall duct, and thus, by transitory shutting off of the gall passages, causes nervous spasmodic jaundice, acholic stools, jaundice, and bradycardia. In the sphere of blood chemistry there is eosinophilia; in the sphere of metabolism, high sugar tolerance and the absence of adrenalin glycosuria.

Omitting from the present discussion purely mechanical disturbances, which require reconstructive surgical treatment for their relief, it seems that there are adequate physiological, experimental, and pharmaceutical grounds for regarding motor disturbances of the digestive tract as being brought about through interference with the above normal mechanism, and that an analysis of a given case should reveal which part is at fault and indicate a treatment based upon an intelligent utilization of this mechanism for restoring conditions to normal.

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HEMOLYTIC STREPTOCOCCI IN TONSILS.

BY TOMAS CAJIGAS, B.S., M.D.

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The micro-organisms which may be found in connection with the tonsils are most numerous and varied, inasmuch as any of the members of the bacterial flora of the mouth may be encountered in the crypts or on the surface of the tonsil.

However, the great majority of these organisms are unimportant, either on account of their infrequency; or of their slight pathogenic significance; or from their slight tendency to infect the tonsil and be disseminated to other tissues of the body from that organ as a focus of infection.

Undoubtedly, the streptococcus holds the most important place in the mycology of the tonsil. The severe inflammatory processes to which it may give rise, the readiness with which it may extend to other tissues causing the well known complications of otitis media, mastoiditis with subsequent meningitis, sinusitis, broncho-pneumonia, empyema, etc., the infection of distant tissues including the joints and cardiac serous membranes, and the more generalized septicemic conditions, have given great stimulus to the study of this organism which has resulted in the accumulation of an enormous amount of literature from all sources.

The presence of Streptococci in normal throats was first noticed in 1887 when Black¹ isolated them from three out of ten cases examined. Three years later, Podbielsky² reported finding streptococci in only one out of 50 normal throats examined, or 2 per cent, while Hilbert³ in 1899 found their presence in all of 100 cases examined, which findings agree exactly with those of Widal and Bezançon⁴ (1894) although the streptococci isolated by the last two authors were found to be non-pathogenic.

¹Black: Independent Practitioner, Vol. 8, p. 462, 1887.

²Podbielsky: Dissertation, Kasan, 1890; Abstr. Centralbl. f. Bakt., 1891, vol. 9, p. 617.

³Hilbert: Ztschr. f. Hyg. u. Infektionskr. 1899, Vol. 31, p. 381.

⁴Widal and Bezançon: Revue Trim. Suisse d'Odont., 1894; Abs., centralbl. f. Bakt., 1894, Vol. 26, p. 1060.

That the hemolytic strains of streptococci are the most important from the standpoint of virulence and pathogenicity, has been observed both clinically and bacteriologically. Unfortunately, therefore, those works on streptococci in tonsils prior to 1903 are rendered of but little importance on account of the fact that the recognition of hemolytic streptococci from the non-hemolyzing strains was impossible, inasmuch as the blood agar plate, now and since universally employed for such distinction, was then unknown.

By the blood agar plate method it has been amply demonstrated that hemolytic streptococci may be present in normal throats: thus Ruediger⁶ (in 1906) reported them in 59 per cent of his cases; Dwyer and Gignoux⁶ (in 1910) in 4.2 per cent.; Pilot and Davis⁷ (1919) in 58 per cent; Smillie⁸ (1917) in 50 per cent; Nichols and Bryan⁹ (1919) in 28 per cent; and Cummings Spruit and Lynch¹⁰ (1918) in 6 per cent of cases.

Blake¹¹ (1919) observed that although the percentage of hemolytic streptococcus carriers in the absence of epidemics was less than ten, during epidemics it ran up to 40 per cent.

That the tonsils are responsible for the high percentage of individuals carrying hemolytic streptococci in their throats is readily seen from the invariably smaller proportion of carriers, after tonsillectomy. For instance, in Tongs¹² series before tonsillectomy the proportion was 57 per cent, as compared to 5 per cent among those who had their tonsils removed.

In individuals whose throats show inflammatory symptoms, hemolytic streptococci are more uniformly met with. Thus, Nichols and Bryan¹³ recovered hemolytic streptococci from the crypts of 75 per cent of 100 pairs of extirpated tonsils examined. Similarly, Pilot and Davis⁷ demonstrated their presence in 97

⁶ Ruediger: J. Infect. Dis. 3: 755, 1906.

⁶ Dwyer and Gignoux: Laryngoscope, vol. 20, p. 1042, 1910.

⁷ Pilot and Davis: J. Inf. Dis. 24: p. 386, 1919.

⁸ Smillie: J. Inf. Dis. vol. 20; p. 45, 1917.

⁹ Nichols and Bryan: J. A. M. A. vol. 71, p. 1813, 1918.

¹⁰ Cumming, Spruit and Lynch: J. A. M. A. vol. 70, p. 1066, 1918.

¹¹ Blacke: Ann. Otol. Rhinol. and Laryng. vol. 28, p. 61, 1919.

¹² Tongs: J. A. M. A. vol. 73, p. 1050, 1919.

¹³ Smith and Brown: J. Med. Res. 26 p. 467, 1914-15.

per cent of cases, and Tongs¹² in 83 per cent. In contrast to these figures may be given the results of the last two authors, using swab cultures from the same series of cases, their number of positive cultures being 61 per cent and 60 per cent, respectively.

I wish to report my findings in a series of 200 patients examined. Most of these patients showed enlarged tonsils, the rest of them exhibited low grades of inflammation. No acute cases are included in this series.

In every case cultures were made of material obtained directly from the tonsilar crypts. The surface of the tonsil was first sprayed with a mild alkaline antiseptic solution; then a straight platinum wire previously sterilized in the flame was very carefully inserted into the tonsilar crypts and the material thus obtained was cultured from each tonsil separately. Cultures were made on human placenta infusion agar $\frac{1}{2}$ per cent acid. Plates were also made from the same material after adding five drops of fresh sterile human blood to tubes containing five c.c. each of the above melted agar cooled down to 45° C. In any case where the primary set of plates was unsatisfactory on account of an insufficient number of colonies, as occasionally happened when much material was not obtainable from the crypts, extra sets of blood plates were made from the twenty-four hours growth obtained in the culture tubes. All cultures were incubated aerobically at 37.5° C. and were examined at the end of 24 hours and 48 hours. In the study of the plates particular attention was given to the hemolytic colonies characteristic of streptococcus. Direct smears were always made from these colonies and subcultures made in any case of doubt. Only those colonies surrounded by sharply defined, clear, transparent, completely hemolyzed, colorless zones, showing chained cocci were classified as being hemolytic streptococci. All of these colonies corresponded to the Beta (β) type of Smith and Brown.¹³

The following table shows the results obtained:

HEMOLYTIC STREPTOCOCCI IN TONSILS.

	<i>Number</i>	<i>Per cent</i>
Pure Culture.....	19	9½
Streptococcus predominating.....	84	42
Moderate number.....	20	10
Few.....	47	23½
Absent.....	30	15

The above table shows the hemolytic streptococcus present in 170 out of 200 cases or in the tonsils of 85 per cent of patients examined.

Attention may be called to the fact that the information obtained by simply reporting the streptococcus as "present" is very slight. It is of the utmost importance to distinguish between the hemolytic and non-hemolyzing, as well as to state the relative number of colonies of streptococcus hemolyticus obtained, so that it may be easily understood whether the streptococcus is in pure culture, in predominating number, in moderate number or if simply an occasional organism is present.

Of course it appears evident that the fact whether a pure culture or an occasional colony only is obtained depends on the method and technique followed in taking the material from the tonsil. A swab culture is almost worthless in many instances in determining the actual condition of the tonsil, inasmuch as it is possible to get such a culture absolutely free from hemolytic streptococci, even when the tonsillar crypts may be just loaded with this micro-organism.

I wish to take this opportunity to thank Dr. W. B. Mason for his assistance in furnishing the cultures which made this work possible.

CONSTITUTIONAL DISEASES IN THEIR ETIOLOGICAL RELATIONSHIP TO INFECTIOUS FOCI OF TEETH FROM THE VIEWPOINT OF THE MEDICAL ROENT- GENOLOGIST.

BY CHARLES A. PFENDER, M.D.

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Biblical reference to teeth may be found from Genesis to Revelation, but few, if any, refer to sanitation. The general impression obtained by a study of Holy Writ is that teeth in olden times were strong and powerful, subject to terrific gnashings and able to withstand it.

About 787 B. C. Amos 4:6 states: "And I also have given you cleanness of teeth," leading one at first glance to believe that we have here the first indication of the subsequent employment of the many dentifrices now so generally used, but alas, more careful study indicates that "cleanness of teeth" merely refers to lack of food material for the quite proper exercise of mastication. Later Matthew 27:44 says: "The thieves also which were crucified with Him cast the same in his teeth," an allegorical expression which one might interpret to indicate that the human denture in those times was not the imperfect oral armature it is today.

Insofar as I could determine the first evidences of abuse of teeth are comparatively recent and apply both to savage tribes and so-called civilized peoples. Early American history shows that extraction, filing and decoration of teeth was not unknown. Van Rippen writes in this connection:

"The occurrence of filed and decorated teeth is rare, very few specimens having been found, but that is not a proof that the custom was not more common in oldentimes. Consideration must be given to the fact that few of the skulls retain their teeth; the majority of them being lost during excavation or having disappeared during the long time of burial. The writer examined a few hundred Peruvian skulls and to his astonishment found about 5 per cent

of them having a few incisors; not one skull had a complete set, the remaining were all edentulous. This shows that if a skull is found having mutilated teeth, it may prove that the custom was more common than sometimes is supposed. . . . The Mayas had the earliest homogeneous and the highest state of culture of any of the American peoples. They preceded not only the Aztecs, Mixtec, Zapatecs, Yucatecs and the Tarascans, but also the Incas of Peru."

Van Rippen's observations also led him to conclude that "The general consensus of opinion seems to be, among those who are qualified to speak on the subject, that dental practices as such were not in vogue among the North American Indians, either at the present or at any time in the past."

Hrdlicka says: "The Indian crania from all periods and all parts of the continent show that 'extraction' or knocking out of teeth was relatively uncommon."

Van Rippen further states that:

"The Australian natives are of a very low standard in human culture. Their two outstanding interests in life are their stomachs and ceremonial exercises—the latter being extensively practiced. . . . There seems to be no record of any teeth mutilations in Samoa. The natives of the Tonga Islands extract or knock out some of their teeth, but only as a sign of the married state. Skulls from the Marquesa Islands show also two or three missing incisors."

Francis Galton, traveling in Western Africa and describing his experiences, says:

"I had occasion to inquire for a professional gentleman, a dentist, as one of my teeth had ached so horribly that I could hardly endure it. He was employed at a distance; but I subsequently witnessed at a distance, the operation. He brought a piece of the back sinew of a sheep, which forms a kind of catgut, and tied this around the unhappy tooth; the spare ends of the catgut were wound round a stout piece of stick, and this he rolled up tight to the tooth and then pressed with all his force against the jaw till something gave way. I saw the wretched patient sitting for the rest of the day with his head between his knees and his hands against the temples."

Van Rippen goes on to say that:

"The negroes in these parts, who were members of the Makatese tribe, related to the Zulus, when troubled with toothache, were brought to the 'expert,' who, after looking about for the offending element, tied to it a thin but very strong sinew, which was in turn tied to a spoke of an ox-wagon wheel. A piece of iron was then heated to a white heat and suddenly thrust close to the face of the subject, who, afraid of being burned, forgot all about his tooth, and, thinking only of the danger in front of him, pulled away, after which he realized that he had extracted his own tooth. There was, of course, a danger of breaking the sinew, but especially strong ones were selected in order to avoid this. This method seems to be the most scientific one, judged from the physiological viewpoint, the lesser stimulus being inhibited by the greater, which is a good example of reciprocal innervation."

The origination of the custom of the knocking out of teeth is still unknown, but Van Rippen believes that the custom originated in Indonesia or on the Asiatic mainland. In Africa twenty-one tribes practice these customs, not associated with other tooth mutilations. "The fact that tooth knocking-out customs are reported on the Pacific Coast of Mexico and South America but not on the Atlantic Coast may also support the theory of an Asiatic or Indonesian origin."

In more civilized communities the care of teeth is almost proverbial now, although the application of this knowledge varies in degree in strict ratio to the intelligence of those engaged or appointed to preserve the general health of individuals and the community at large.

It is hardly necessary in this day and time to say that modern dentistry has received an impetus for excellence within the past ten years which has resulted in most marvelous achievements. The conservation of teeth, the numerous efficient methods lately developed and the skillful dexterity of dental surgeons is demonstrated on every hand, emphasizing the increased study of etiological factors and their relation to pathological dental conditions.

Coincident with the routine employment of the Roentgen ray in the study of the pathology of oral conditions, renewed interest has been given to greater accuracy. Formerly unrecognized changes are clarified through the medium of X-rays. We know now that the roentgenogram is the most reliable aid in the diagnosis of an infected tooth and a correct interpretation shows whether it menaces the health of the patient.

Darling quite aptly states that:

"Until the advent of the roentgenographic diagnosis, which came like a day of judgment upon the incompetent and incapable, a principle of dentistry was the preservation of the tooth at any cost. When modern medicine reached the conclusion that septic conditions exerted a greater influence on the health than had been previously thought possible, and supported this conclusion with bacteriologic and roentgenographic examination, dental practice had to be revised. Dental practice is still being revised, for the facts were too strong to be controverted."

The importance of the skillful employment of the roentgen ray in the hands of the dental and medical roentgenologist is well recognized. Darling says: "After all is said the clinical findings are inconclusive. Only the roentgenogram will define the condition about a tooth so that extraction or non-extraction may be prescribed rationally."

Grieves states:

"Good roentgenograms are rarely misleading and it is the writer's experience that post-operative results are always more pronounced than the X-ray would indicate. Just as soon as it can be radiographically demonstrated that diseased periapical regions exist as described, medication should stop and surgery begin."

In this connection Potter states that:

"A general survey of the denture by a series of dental films is an important adjunct to the examination of a pyorrhea case. It is often a short cut to a diagnosis and is less disagreeable than instrumental examination, but should supplement rather than displace other diagnostic methods. The most important diagnostic points are observable in the region of the intimate bony vestments of the roots and are obtainable only from the most critical roentgenograms."

In his conclusions in a most instructive article, Darling says: "The roentgenogram, when interpreted by the trained medical or dental roentgenologist, is one of the most dependable means of diagnosis of conditions that may indicate tooth extraction."

These and many other observations tend to show that the earlier practice of the conservation of teeth at any price has been somewhat modified as the result of radiographic diagnosis.

In the earlier days of roentgenological lore it was customary to x-ray only the aching tooth, and only then when repeated treatments had failed to relieve the suffering. Later it became more popular to x-ray all teeth under treatment in the effort to obtain as much information as possible of the pathology of the teeth and alveoli.

In recent years dental surgeons feel it incumbent to exercise careful supervision of the dentures of their patients and have inaugurated serial radiographic studies at regular intervals, thus establishing a concise and instructive knowledge of the progress of restoration of dental and periodontic conditions.

The crowning achievement of the past decade was the radiographic discovery of the possibility of serious focal infection of teeth in the absence of all local signs and symptoms and the indication of the relationship between oral foci and constitutional diseases. The acceptance of this semi-occult symptom-complex has again revolutionized the opinions of the dental and medical professions, particularly with regard to extraction, and we must now recognize the teeth as the seat of more infection than any other organic structure.

It is not within my province to enter into the detailed study of the various agents which have been held to be the etiological factors in the production of apical or periapical infections of teeth or periodontoclasia, more commonly known as pyorrhea, still I hesitate to abstain from mentioning at least two cardinal groups.

Infections of gums and teeth are occasioned by two types of organisms, namely, zoological or bacterial. Both may be demonstrated in the periapical tissue. In the treatment of the animal parasitic infection we are most fortunate in having prac-

tically a specific for the destruction of the ameba in emetin hydrochloride. Combining its use with surgical cleaning and other present day dental procedures a cure usually results. Sometimes a brilliant result is obtained even when associated bacterial infection is ignored entirely. Then again, careful attention to both bacterial and zoological infection is crowned by success, while on the other hand a certain percentage of cases fail to become culturally clean or sterile no matter how careful the treatment employed. In my limited study of the etiology of apical and periapical infection of human teeth, I have found it most difficult to escape the conclusion that *amebic infection is not seriously considered by dentists as a rule.*

No doubt the difficulties presented by the biological study of these animal organisms deter many from pursuing that line of investigation. Since 1849, Ehrenberg and others have pointed out the possible etiological relationship of ameba to oral disease. Numerous observers certainly have shown conclusively that ameba are present almost universally in or around diseases of the mouth, yet we still need the final proof that they produce a specific infection. The discovery of spirochaetes in trench pyorrhea is of interest and its present treatment variable. The English dentists prefer to pack the gingival tissues with copper sulphate combined with mechanical measures.

Bacteriological studies of microorganisms found in various dental infections and their relation to the blood supply have been exceedingly illuminative. Henrici and Hartzell, Rosenow and others were enabled to demonstrate from apical abscesses and pulps of teeth the almost constantly present *Streptococcus viridans*. In many instances other bacteria such as staphylococci, the *bacillus fusiformis* the colon bacillus and spirochaetes were found associated. Hartzell and Henrici found streptococci in 150 out of 162 cases of pyorrhea alveolaris.

Rosenow's experiments in animals revealed the striking tendency of the bacteria to localize in the tissues involved in transverse myelitis, multiple neuritis, chronic arthritis, gluteus myositis, lumbar neuritis, herpes zoster, trigeminal neuralgia, keratitis and iritis. It is of vital importance to bear from no less

an authority than Rosenow that "the harm from foci of infection must be considered as being due to the absorption of toxic bacterial products as well as to the entrance of the living bacteria into the circulation and their localization."

Henry A. Cotton in a most instructive report on mental diseases states that:

"The organism principally concerned in dental infection is a non-hemolytic streptococcus known as *Streptococcus viridans*. The term non-hemolytic streptococcus is applied to a large group, the members of which vary somewhat in their morphology but have the same cultural characteristics. They are differentiated from the hemolytic types or long-chain streptococcus, the organism which is very virulent and rapid in its action, as we know from the results of blood poisoning. The non-hemolytic group are non-pus-producing, slow growing organisms which do not cause pain, swelling or even a rise in temperature, hence their presence is easily overlooked. They produce a chronic infection in contrast to the hemolytic or virulent types; and this infection may persist for years, without the patient or physician becoming aware of its presence, unless tests are made to determine its presence and measures taken to remove it. The non-hemolytic types may, after many years, become in a sense virulent in that they overwhelm the patient and cause death by toxemia. While they are non-pus-producing, and therefore their presence is masked, they are extremely toxic; and all of the important symptoms are due principally to this characteristic, especially where the nervous system is involved."

It is a well recognized fact that infected teeth alone may cause very serious systemic diseases and that the microorganisms may and do migrate to other organs and there produce secondary foci. The mere extraction of the infected teeth is therefore only one of the steps necessary for the restoration of the health of the patient. It becomes imperative to treat the secondary infection which has occurred and this emphasizes the necessity of closer cooperation between the dentist and the physician if the best interests of the patient are to be served. Cotton found that in 25 per cent of his cases the teeth alone seemed to be the source of the infection, and with the removal of this source, the patients

rapidly recovered from their mental disability. In 25 per cent both teeth and tonsils were infected, and in 50 per cent the gastro-intestinal tract was involved with either the teeth or tonsils or both, and improvement was not obtained until the nature of the infection was determined and proper means for its elimination inaugurated. In this connection Cotton aptly says:

"One might with reason ask: 'Why bring in gastro-intestinal infection in discussing teeth, a purely dental problem?' The explanation lies in the fact that the infected teeth, or the bacteria concerned in this infection, have a direct and very important relation to the pernicious activity of the colon bacillus. This organism occurs normally in the lower intestinal tract. Outside of its normal habitat it is extremely toxic; it loses its benign character and becomes pathological. Consequently while apparently we can see no relation between infected teeth and intestinal infections of a chronic type, clinically there is a very close relation. It is well for the dental profession to recognize all the consequences and results of chronic root infection and to end, once and for all, this far-reaching and dangerous type. I feel that I do not overstate the facts when I say that insanity can be prevented or cured by a conscientious practice of the principles discussed in this paper; and that, in the same way, many other diseases which, in most cases have a fatal termination, can also be prevented or cured if the process has not gone too far."

Cotton extracts all capped and pivot teeth, removes all fixed bridge work and insists on extraction of every suspicious tooth for he believes that his experience in the study and treatment of mentally diseased fully justifies such a radical course in the light of his marvelous achievements.

Rosenow states that:

"The effort to save the teeth is commendable and one worthy of trial, provided that the pulpless teeth be extracted in the event that the complement-fixation test for *Streptococcus viridans* remains positive, that the patient continues to have anemia, after all these root canals have been 'sterilized' and refilled, and it has been proved that the x-ray films for all are negative. It is of course assumed that foci outside of the dental area and other causes have

been eliminated Regarding the question of what to do with pulpless teeth, in the light of the experiments and the clinical facts as now known, it is safer to err on the side of extraction; for it is a common observation that individuals of advanced age, who have worn artificial teeth for a number of years, are in better health as a rule than individuals of corresponding age who have retained defective natural teeth. A case in point is the following: A woman of middle age with badly infected teeth, infected tonsils and typical symptoms of exophthalmic goiter, gained 20 pounds in weight, and the infection of the tonsils and the symptoms of exophthalmic goiter disappeared during the two months intervening when she was "gumming" her food, and she has remained perfectly well for the past five years."

Nodine goes on record as stating that:

"Those who have employed x-rays as a routine found 95 per cent of the teeth whose pulps have been devitalized and the attempt made to fill the canals have incomplete or no root canal fillings; 75 to 80 per cent of these teeth have apical abscesses or apical infections radiographically discernible. Of the 5 per cent of those teeth whose root canal fillings do reach the apex, a large percentage will yield bacterial culture."

M. H. Garvin a well known dentist of Winnipeg, Canada, reports the following experience:

<i>Patients</i> 1,130	<i>Teeth</i> <i>X-rayed</i> 3,500	<i>Found</i> <i>infected</i> 1,635 (47.7%)	<i>Not</i> <i>infected</i> 357	<i>At least one in-</i> <i>fected tooth</i> 773
<i>Filled Teeth</i>		<i>Number</i>		<i>Infected</i>
To apex		448		39%
Three-quarters		663		42%
One-half		108		56%
One-quarter		137		67%

I have tabulated some of the findings by Arthur D. Black, M.D., D.D.S., of Chicago, Illinois, and we note:

I.

<i>Age.</i>	<i>Abscessed Teeth.</i>	<i>No. of Abscesses per person.</i>
20-24	52%	2.6
25-29	51%	2.2
30-39	63%	
40-49	59%	2.6
50 or more	50%	
<i>Year.</i>	<i>Persons.</i>	<i>Alveolar Abscesses</i>
1917	300	59%
1918	300	41%

The improvement is probably due to a better realization of the danger of these infections to health, with the result that a large number of infected teeth have been extracted.

II.

<i>Roentgenograms About 16,950</i>	<i>Root Fillings. 1695</i>		<i>Per Cent. 10</i>
	<i>Good Root Fillings.</i>	<i>Abscessed.</i>	<i>Per Cent.</i>
Large Canals	343	31	9
Large Canals	<i>Poor Root Fillings.</i> 570	356	63
Small Canals	<i>Good Root Fillings.</i> 184	19	10
Small Canals	<i>Poor Root Fillings.</i> 413	271	64

He concludes that we still have ample opportunity for better dental filling so as to reduce the percentage to about one-fifth of the present number.

Duke and Diveley state that:

"In its relationship to oral sepsis one can say, we believe, both that chronic infections of widely varying types may have a deleterious influence on oral sepsis and render it difficult to cure and prone to recur, and also that oral sepsis may increase the severity of other chronic infections localized in other organs, whether due to the same or to totally

different organisms Resistance to infection may be lowered by a large variety of diseases and conditions. For example, by chronic alcoholism, drug habits, diabetes, nephritis, circulatory diseases, anemia, and other blood diseases, diseases of the ductless glands, lead poisoning, scurvy, the therapeutic use of mercury and potassium iodid, pregnancy, lactation, senility, overwork, lack of proper nourishment, debilitated conditions of any sort due to disease, faulty methods of living, etc. In patients having the above diseases, oral and other forms of sepsis are a greater menace to health than is the case with normal individuals, and are also more difficult to cure."

Anderson expresses the opinion that:

"Cases of oral sepsis present many interesting and instructive features. Various clinical and pathological interrelationships have been recognized for years, as tonsilitis and nephritis, tonsilitis and rheumatism; tonsilitis and appendicitis; tonsilitis and endocarditis; erythema multiforme, and chorea; appendicitis and cholecystitis, gastric and duodenal ulcer; exophthalmic goiter, and diseases of the other glands of internal secretion, scleroderma, arthritis, etc., Raynaud's disease, arthritis deformans, scleroderma, purpura and urticaria; oral infection, tonsilitis, nephritis, and arterial hypertension in some instances. . . . Oral infections are usually of a low grade of virulence, sealed in, and extend over a long period. To study the evolution of such infections and to appreciate their various clinical manifestations they must be followed for a long time, the same as syphilis and tuberculosis. Private patients, therefore, offer a more favorable opportunity than hospital patients."

In the light of these recent observations one can with difficulty refrain from being impressed by the evidence furnished and we are not surprised to find that many so-called incurable constitutional diseases clear up after inaugurating treatment scientifically directed towards the removal of the primary etiological irritant, namely dental or periodontic disease, and the elimination of the secondary involvement superinduced thereby.

Draper says:

"There is abundant evidence to show that when the teeth, tonsils and stomach are infected, there is an extensive, variable and absolutely incomprehensible infection in the aboral portion of the entire alimentary canal."

Lewellyn F. Barker tells us that:

"The two chief causes of diseases of the digestive apparatus having their origin in oral sepsis, are chronic alveolar infections, occurring in the periapical tissues, and infections taking place at the gingival border, such as that proceeding from gingivitis, pyorrhea, impacted and partially erupted teeth, etc. The most common manifestation in the digestive apparatus are gastritis, gastro-enteritis, achylia gastrica, pylorospasm, and toxic hepatopathy. In some instances, it seems probable that gastric and duodenal ulcer are secondary to oral sepsis. Whether appendicitis and cholecystitis may occasionally be caused by oral sepsis, is still in doubt."

Dr. Billings of Chicago reports interesting results as noted in the tabulation which follows:

<i>Roentgenograms.</i>	<i>Presbyterian Hosp.</i>	<i>Cook Co. Hosp.</i>	<i>Alveolar Abscess</i>
150 Cases	150	.....	89%
329 Cases	329	44%
Arthritic group.....	76%
Nephritic and Cardiovascular.....	47%
Gastro-intestinal group.....	23%

J. B. Schlund, a dental surgeon of Tacoma, Washington, shows:

<i>Roentgenograms.</i>		
<i>Teeth.</i> 1500-2000	<i>Good Root Fillings.</i> 40	<i>Of these 40—Abscesses in</i> 12

K. R. Collins, M.D., Cleveland, Ohio, presents two very interesting tables:

TABLE I.

Percentage of the various localized infections occurring in 849 cases of Metastatic Arthritides	
<i>Localized Infections</i>	<i>Per Cent.</i>
Tonsils.....	25.5
Teeth.....	18
Urethra.....	17
Sinuses.....	17
Lungs and Bronchi.....	5
Bladder.....	4
Kidney pelvis.....	4
Appendix.....	2
Gall Bladder.....	2
Furunculosis.....	6
Typhoid fever.....	6
Scarlet fever.....	6
Tetanus.....	6
Dysentery.....	6

TABLE II.

Organisms Found in the Joint Lesions	
<i>Organism</i>	<i>Per Cent.</i>
Streptococcus.....	31
Gonococcus.....	14
Staphylococcus.....	8
Colon bacillus.....	4
Combination of two or more.....	38
[Kreuscher, P. H., New York Medical Record, Vol. 90, p. 834.]	

Charles Mayo states that about 85 per cent of children have infections of teeth, tonsils or adenoids, curable and preventable, that about one-fourth of the entire population has septic mouths at 25 years of age, at 45 nearly 90 per cent are septic and after 50 practically all mouths are septic. An interesting fact was revealed by the examinations of the higher officers in Washington for overseas service where it was found that those with good dentures were well, and that those with bad dentures were not well, and showed the effects of chronic infection. They were usually debarred from foreign service.

H. B. Anderson, M.D., Toronto, Canada, presents:

CLASSIFICATION OF DISEASES ASSOCIATED WITH 257 CASES OF
ORAL SEPSIS.

	<i>Occurring Alone</i>	<i>Associated with Other Diseases</i>	<i>Total</i>
Anemia.....	13	35	48
Gastric and duodenal ulcer, appendicitis, gall-stones, etc.....	22	25	47
Hypertension, albuminuria, kidney disease.....	27	36	63
Mucous colitis.....	2	3	5
Neuritis, lumbago, sciatica, etc.....	27	47	74
Psychasthenia, nervousness, etc.....	28	45	73
Raynaud's disease.....	1	4	5
Skin diseases.....	18	13	31
Tonsilitis.....	4	31	35
Goiter.....	5	22	27
Diabetes, miscellaneous.....			69
Total.....	147	251	477

H. J. Kauffer has compiled valuable statistics from the Department of Dermatology and Syphilology, Vanderbilt Clinic, New York City:

<i>Cases.</i> 1100	<i>Edentulous.</i> 23	<i>No Infection.</i> 276 (25%)	<i>Pyorrhea or Apical Abscess.</i> 823 (75%)
<p>Studied 115 cases where dental work antedated cutaneous infection. Observation time three months. <i>Treatment:</i> Mouth hygiene; extraction; sockets curetted or operated upon; foci surgically removed.</p>			
<i>Smear Cultures.</i> Streptococci.....77 Diplococci.....14	<i>Pure.</i> 60 12	<i>Associated.</i> 17 (14 Staph) 2	<i>Unidentified Cocci.</i> 16
<i>Treated Cases.</i> 115	<i>Cleared Up.</i> 31	<i>Improved.</i> 33	<i>Total.</i> 64 (56%)
<p>Of these 31 cleared up: Streptococci were found in 16 Staphylococci were found in 9. Gram neg. diplo. were found in 5.</p>			

Smith and Ludwig, of Lincoln, Nebraska, submit instructive reports on teeth infection occurring in children:

107 cases apical abscesses, four secondary fistulas, eight gingival abscesses and one abscess in the roof of the mouth, in children ranging from four to eleven years of age.

<i>Organism.</i>	<i>Times Found</i>
<i>Streptococcus hemolyticus</i>	26
<i>Streptococcus pyogenes</i>	19
<i>Streptococcus viridans</i>	2
<i>Staphylococcus pyogenes citreus</i>	9
<i>Staphylococcus pyogenes aureus</i>	36
<i>Staphylococcus pyogenes albus</i>	7
<i>Bacillus pyocyaneus</i>	1
<i>Diplococcus pneumoniae</i>	18
<i>Micrococcus catarrhalis</i>	4
<i>Bacillus fusiformis</i>	1
<i>Diphtheroid bacillus</i>	3
Sterile	8

A summary of all these tabulations cannot fail to impress us with the relationship of bacterial infection of teeth and constitutional diseases. It is certain that future study will reveal further unsuspected pathological conditions and lead to more successful treatment of many diseases to which human flesh is heir.

In the roentgenological study of the pathology of gingival and dental conditions I have found it convenient to classify my cases into three subdivisions, as follows:

1. Cases with immediate or acute dental pathology (such as acute abscesses with or without pressure on the inferior dental nerve and pathology involving ocular changes).
2. Slight or difficultly diagnostic lesions in teeth of subacute or chronic nature (chronic alveolar abscesses, periodontoclasia and malignant conditions about the face and head).
3. Pathology involving one or more teeth associated with marked constitutional toxic symptoms (such as advanced pyorrhea or periodontoclasia, multiple alveolar abscesses, etc). These may again be subdivided into:
 - a. Occult focal dental or periodontic pathology.
 - b. Demonstrable dental or periodontic pathology.
 - c. Periodontic pathology, such as mandibular necrosis, unerupted or impacted molars, teeth in the antrum, cysts or tumors of the maxilla or mandible, etc.

In the study of cases with constitutional symptoms I found it expedient in order to save time and facilitate an early diagnostic report to arrange cases in the following groups:

Constitutional Symptoms:

1. Acute Symptoms; with suspected or occult oral involvement. (Hemicrania, etc.)
2. Chronic Symptoms.
 - a. With definite focal dental or periodontic pathology.
 - b. With unsuspected dental or periodontic pathology.

Vague general constitutional symptoms where no definite etiologic factors were discovered and where roentgenological examination revealed dental or periodontic pathology, and where treatment or extraction of teeth was followed by improvement or complete recovery either immediately or later. This class I have placed into three categories, as follows:

1. High blood pressure.
 - a. Early cases where cardiac and renal changes were not marked.
 - b. Late cases with marked cardiac and renal changes.
 - c. Late cases without any cardiac and renal changes.
2. Asthenic Type; subnormal blood pressure. Cases where toxic absorption from diseased teeth or gingival pathology exercised a paralyzing effect on the vagus or splanchnic nervous system (usually found in young women).
 - a. Exophthalmic goiter.
 - b. Hyperthyroidism.
 - c. Ocular disease
 - d. Vague arthritic symptoms.
 - e. Gastro-intestinal symptoms.
3. Chronic Arthritic Type; usually of long standing with no suspicion of dental or periodontic etiology.
 - a. Where osseous or calcific deposits have formed.
 - b. Where arthritic changes have not progressed to the degree mentioned in type a.

Localized lesions produced by oral infection, direct inflammatory changes or secondary irritation.

1. Malignant bony growths (sarcoma, carcinoma) of mandible or antrum.
2. Malignant growths of soft tissue origin, such as epithelioma of the lip.

It is difficult in the absence of any precedent to escape errors of both commission and omission, but as the work of years accumulated and broadened experience permitted pertinent deductions, I now feel convinced that careful attention to the details outlined in the above classification will be of practical value as a working basis of the roentgenologist in his study of oral and aboral pathology.

Abstract of paper read by Dr. C. H. Frazier before the George Washington University Medical Society, January 17, 1920.
"The Major Trigeminal Neuralgias and their Treatment, Including a Discussion of the Etiology and Clinical Manifestations of the Disease, the Methods and the Results of Treatment."

In his remarks upon the Major Trigeminal Neuralgias and their Treatment, Frazier called attention particularly to the prevailing misconception as to the results of the radical operation not only with regard to the mortality but as to cosmetics. The picture in the minds of the profession is drawn more from the conditions of the early days of the surgery of the Gasserian ganglion when the mortality was high and the scar and complications more or less disfiguring. In contrast to that period, Frazier summarized his own experience in the last 124 cases of his series, covering the period of his latest technic, in which there was but one death, a mortality rate of *less than one per cent*. He compared this with the 22 per cent of the earlier days and Horsley's mortality of 5 per cent, in an intermediate period to illustrate how the risks of operation had been reduced. The cosmetic results are well nigh perfect as the scar is entirely concealed within the hair line. He called attention to his most recent innovation in technic, one which conserves the motor root and the function of the masseter, temporal and pterygoid muscles, the other which prevents the occurrence of trophic keratitis with those improvements in technic and the reduction of the mortality to less than one per cent, the operation may be said to have attained a stage of perfection.

He discussed at some length the differentiation between the major and minor forms of neuralgia and maintained that the major neuralgias were never of a peripheral origin. The theory of a peripheral lesion and ascending neuritis must be discarded once and for all. He warned surgeons of the necessity of excluding from their operable group those cases in which the symptoms were those of a neurosis. In these cases operation will be of no avail.

The relief of the major neuralgias is accomplished by only two methods, alcoholic injection and the conventional major procedure of Spiller. The vast majority of his patients have been subjected to needless years of suffering by attempts to relieve by other totally ineffective remedies. As a rule he leaves to his patient the choice of method as between alcoholic injection, with its average relief of nine to twelve months, and the radical operation with its permanent relief. The average patient in the earlier stage of the disease will elect the alcoholic injections and continue with these for an average period of four years when his morale has been broken by repeated disappointments and inevitable recurrences. The patient, who, when he consults the surgeon, has experienced the disappointments and failure of alcoholic injections, will choose without exception the radical operation.

Frazier dwelt at some length upon the technic of alcoholic injections and stressed the importance of practice and experience in its successful performance. While not a formal operation in the ordinary sense of the word, it requires quite as much preparation and familiarity with details as many an operation which the physician would not venture to perform without adequate preparation. He has eliminated the suffering incident thereto by the use of nitrous oxide anaesthesia. This is possible only when one is sufficiently familiar with technical details and the anatomical variations. The dread of an alcoholic injection on the part of the patient, who has had one or more without an anaesthetic is so great that the agony will be put off as long as the painful paroxysms can be tolerated and the patient will return only when the succession of attacks has exceeded his endurance. Hence the introduction of a general anaesthetic in alcoholic injections is a genuine and humane contribution to the technic.

Because of the high percentage of corneal complications, which he estimated conservatively at 25 per cent, Frazier believes injection of the ganglion itself should be reserved for the exceptional case when the radical operation was contraindicated. Under light ether anaesthesia, he recommends the injection of

the ganglion for the relief of suffering in inoperable malignant lesions in the trigeminal territory.

In his review of the end results of operation, the speaker discussed some of the peculiar paresthesias which are observed in a minority of cases, particularly from the standpoint of their etiology. He regarded them as of central origin, persisting during the process of degeneration of the sensory root. Until this was complete the paresthesias might persist.

In his summary, he referred to his experiences with the major operation—section of the sensory root—as eminently gratifying to the surgeon and satisfactory to the patient; he stressed the necessity of differentiating the minor from the major neuralgias as essential to the selection of appropriate methods of treatment; he concluded with the statement that for the major form there are two and only two sources of relief, the transitory relief from alcoholic injections and the permanent relief from section of the sensory root.

HEMIANGIOMA OF THE SCALP.

(Carcinoma of an Aberrant Thyroid Gland.)

PAGET'S DISEASE OF THE BONES (Osteitis Deformans).

BY TRUMAN ABBE, A. B., M. D.,

Clinical Instructor in Surgery, George Washington University.

On July 8th, 1919, I was asked by Dr. Masterson to see Mrs. Z. The day before he had attempted in his office to remove what appeared to be a wen on the back of her scalp that after having been present quietly for a year or so had recently increased more rapidly in size. On cutting through the skin and into the mass there had started a hemorrhage so terrific that it could be controlled only by rapidly packing the cavity and putting on a tight bandage. He asked me to assist him at the first dressing. On removing the packing blood welled up in the wound so fast that we made no attempt to investigate the source of the bleeding but covered the wound with gauze and put on a compression bandage. The second dressing done at George Washington Dispensary two days later was much less bloody, and after that the wound healed smoothly.

A month later since the mass had regained its original size we gave it some X-Ray treatment hoping to control the growth and the vascularity of the mass. At that time there was a slight pulsation to be felt in the mass. Following the X-Ray treatment the hair fell out but the mass kept on growing, small blood vessels appeared in the skin around it and over it and the pulsation in the mass became very distinct. At the end of six weeks we had changed our diagnosis from a sebaceous cyst to an angioma. Then we changed our treatment and attempted under local anesthesia to coagulate the periphery of the growth and so cut off the blood supply through the large vessels then evident in the soft tissues. We circumscribed the growth with a ring of coagulation getting a closing of the evident subcutaneous vessels but the mass kept on growing and the large vessels reappeared.

The patient we present to you. Behind the right ear in the tempero-occipital region you see a mass the size and shape of

half an orange. The skin over it is normal except at the periphery where the scar of the coagulation is evident. In one or two spots the coagulated area has not yet completely epithelialized over but the skin is so healthy that there is no doubt that the skin will cover over that line in a week or so. You see the short downy hair growing up in the area denuded by the X-Rays, and under the skin you can see several large tortuous vessels. Pulsation in the mass is easily felt and in a good cross light you can even see the pulsation. It would seem as if the mass were composed of a group of enlarged blood vessels that are increasing in size. We have considered it a hemi-angioma of the cavernous type.

As to further treatment we are very willing to accept suggestions. What we have done so far has merely temporarily decreased blood supply through the skin. As to operative procedures: the woman is eighty-five years of age, as you see a little bit of a frail woman with marked irregularity of heart action but no murmur. She has dyspnea on slight exertion. She has lost two children of tuberculosis and has suspicious signs over her lungs. Any operation would be attended with considerable loss of blood and would be very tedious, so that we doubt if it would add to the patient's life and health.

Postscript, July, 1920.—Without following any of the good advice as to active procedures offered by the Society Members we continued coagulation of the periphery of the mass. In January Mrs. Z. had one or two active hemorrhages from a portion of the coagulated area that had not healed and we brought her into George Washington Hospital. Those areas never completely epithelialized over and on several occasions there was considerable bleeding from the denuded area. Her strength became less and less without an evident cause therefor. She had no fever, no cachaxia. She did have some bronchial cough and at times marked loss of compensation for a few hours due to the myocarditis. On March sixth, she ate her breakfast as usual and a half hour later was found dead in bed. Evidently it was a cardiac death.

At autopsy Dr. Hunter found in the mass what looked more like brain tissue than a vascular structure. There was erosion of the skull bones but no penetration of the dura though the bony defect in the skull was an inch and a half in diameter. The lungs showed an old tuberculous process and the heart a myocarditis. The abdominal contents and the kidneys were practically normal for a woman of her age. The thyroid was apparently normal and so not examined.

The histological examination of the tumor was a great surprise. The tumor was a typical thyroid gland which had undergone carcinomatous degeneration. Our hemangioma of the scalp had become a cancer of an aberrant thyroid located behind the ear.

How do we get thyroid tissues in the back of the scalp? To explain it we have to consider the embryological development of the thyroid gland from the distal end of the thyroglossal duct which grows downwards and forwards from a portion of the foregut. And then we have to think of the ear as developed from a branchial cleft that once also was a part of the foregut very close to the region from which the thyroglossal duct sprouted. We consider the concha as coming from the wall of the first branchial cleft and the thyroglossal duct from the sinus arcuatus in the region of the second branchial cleft. If we could identify the structures still earlier in the development of the embryo we would find the branchial cleft and the sinus arcuatus still closer together. At that stage the cells that are to develop into the normally placed thyroid and those that are to develop into the tissues covering the skull below and behind the ear must have been very close together and if one or two of the potential thyroid cells were dragged along with that out-budding of the branchial cleft, it doesn't take such a great stretch of our imagination to see how in this instance they became transplanted back of the ear and there lay dormant until the loss of balance of the tissue growth that occurs with increasing years let those misplaced thyroid cells spring into dominance and control the life of the patient.

The second case I take the liberty to present as representing the dispensary is "Miss Clara Watson." Everyone who has gone to the dispensary in the past few years knows her as its most persistent patient. She began coming in March, '17, complaining then of pain in her left tibia. Her complaint today is the same. At times she has taken a fancy to some one of the physicians who happens to be treating her and sees fit to telephone him several times a week, "Doctor, my leg is paining me something awful. I can't stand it!" At that point I shut her off (I happen to have been her favorite a good deal of the time and none of the dispensary staff seem to be one whit jealous). When she telephones I shut her off by telling her to come to the dispensary on Saturday and I'll see her there. And she smiles and says, "Next Saturday? Alright," and hangs up rejoicing. She is just simple minded enough not to care how you treat her so long as you do treat her. Put a piece of adhesive plaster on the painful spot and it will be better for a week. Rub it with liniment and it gives great relief. Give her a cathartic and she gets rid of all her pains for several days. Give her a tonic and it does her worlds of good. But she keeps on complaining of that leg. At times we have shifted her idea of pains from that leg to the other, or to the shoulder, by suggestion, but the change in contour of that tibia is so evident that the pains keep coming back to that tangible abnormality. At times she has had troubles in other parts of her body; she had mastoid operations on both ears by different men to satisfy her complaints. We do not believe that the mental condition is dependent on the Paget's disease but rather an intercurrent condition.

The examination of the left leg shows a peculiar local anterior bowing of the upper portion of the tibia with a marked thickening of the bone. The patient's complaint of tenderness and pain we have to discount greatly. The other bones in the body on inspection and palpation do not show any marked abnormalities. The X-ray examination of the left tibia made in 1917 showed the marked tendency to cystlike formation with the lateral overgrowth of bone under the periosteum that is char-

acteristic of Paget's disease of the bones, the osteitis deformans that is one of the interesting curiosities.

In this case the most evident trouble is in the tibia which is one of the most common seats of the trouble, possibly because it is the most easily palpated of the larger long bones. The X-ray plates show similar tho less extensive involvement of the right humerus, the left humerus, and the right tibia in order of the degree of involvement. The femurs and the forearm bones do not give characteristic pictures. The skull is thickened, and the chest expansion is limited to less than one inch. And yet the patient complains of only the one bone. We wonder if many of the cases reported as limited to one bone are not similar cases where the complaint and therefore the examination has been directed to only the one bone.

The duration of the disease is also of interest. The patient dates all her troubles to a bicycle accident when she was fifteen years of age (she is now fifty-two, and still menstruating), when she thinks that she broke her leg though she stayed in bed only two weeks and then walked without splint or crutches but noticed the bowing of the tibia. The leg apparently did not begin to pain her until some six years ago when she began to seek treatment for it. The changes in the bones as shown by the X-ray plates taken when she first came under observation and again recently show so little change that they would seem to corroborate the suspicion that the disease had been present at least ten times as long as the interval between the plates, some twenty-five to thirty years, providing that the rate of development has been constant. How much longer will it last before it undergoes a malignant degeneration at some point and ends her simple life?

Our treatment has been largely on the placebo type in order to keep her under observation. Once in August '18 we took out a piece of bone an inch wide and an inch deep and four inches long from the crest of the tibia for study*. The wound healed

*Examination shows this to be a typical case of Osteitis Deformans (Paget disease). There is considerable thickened subperiosteal shell, disorganization of the laminated structure, invasion of the marrow cavity with cyst-like formations, filled with a mucoid-like substance. There is also present considerable fibrous tissue with soft bone production, but no halisteresis is apparent.

perfectly by primary intention showing that the healing processes in the bone as well as the soft tissues have not been unbalanced either by the constitutional changes or the local disease. Of course there was the psychic element in the operation that gave relief from pain for months afterwards, but that passed and the same old complaint remains. One line of treatment that we hoped might give a control of the growth was dosage with pituitary gland. We reasoned that we might have an antithesis to acromegaly which involves the bones of the hands, feet, face, and ends of long bones as well as other tissues, and acromegaly we think of as due to dyspituitarism. Paget's disease involving the shafts of the long bones of the limbs and the flat bones of the skull seemed to be the complement. So we tried dried pituitary gland as treatment for several months but with no local evidence of change. Perhaps we did modify the course of the disease, who can tell. We hope some day in the long distant future to report on the final condition of all the bones in her body.

ACUTE MERCURY POISONING.

By ROY FRANKLIN DUNMIRE, M. D.

Mercury chloride, bichloride or corrosive sublimate is the usual form in which mercury is used when taken for suicidal purposes and, as a rule by mouth, either by swallowing the commercial tablets or dissolving the tablet in water and drinking the solution.

Three to five grains have proven fatal, while recovery has resulted after the administration of 100 grains under prompt treatment. Two cases resulted fatally from an external application of an ointment for the itch.

Mercury, however administered is an active gastro-intestinal irritant. When taken by mouth the symptoms always begin within a half hour. Burning in the pharynx, esophagus and stomach, retching, constriction of the throat, acid metallic taste, etc. Pain in the epigastrium is severe and comes on promptly and is associated with nausea and vomiting of material streaked with blood. A white coating forms on the shriveled mucous membrane of the mouth. Later there may be purging and straining associated with bloody stools. The urine is scanty or suppressed. Hemorrhage may occur from the mouth, stomach, bowels or kidneys. As a rule the severity of these symptoms are in direct relation to the amount of the poison absorbed.

Exceptions: 1. Three and one-half grains proved fatal with all symptoms. 2. About 480 gr. fatal with no symptoms of any consequence.

Death may occur in a half hour but usually life is prolonged from two or three days to two weeks. In the latter cases death is usually caused by uremia.

Post mortem. Inflammation is found along the alimentary canal. Mouth, throat, and stomach show patches of congestion and erosion. The colon is especially involved, often with necrotic areas. The kidneys show a characteristic acute parenchymatous nephritis. The other organs are unaffected.

Treatment consists of promptly emptying the stomach either by vomiting, by the use of emetics in milk, or better still

by the use of the stomach tube, using as a wash milk and eggs, $\frac{1}{2}$ doz. to two quarts. Casein like albuminous compounds acts as an antidote. Magnesia, preferably the sulphate converts the bichloride into a less injurious compound. The albuminate of mercury dissolves in the excess of albumin, hence the necessity of emetics or pump. Active cathartic is essential. The after treatment is that of a gastro-enteritis and nephritis.

This case reports J. W. T., age 36. On account of domestic troubles wanted to die, and attempted to commit suicide.

Sunday, June 5th, about 2 p. m., he swallowed four bichloride tablets, which caused slight burning in the throat at the time. Within 15 to 20 minutes he was seized with severe pain in the epigastrium, became nauseated and within a short while vomited, the vomiting being continuous for several hours when he fell across the bed and knew nothing more until the following day at 5 a. m. On regaining consciousness, the vomiting began again and was almost continuous for the next two days. During this time the patient was unable to retain food or water; Thirst was intense. He confined himself to the house until he was removed to the hospital Wednesday the 8th.

The patient stated that he did not void urine after 10 a. m., Monday.

Examination of the patient. Male, weight about 155 to 160 lbs. in a semi-conscious state. Partial history was given by friends. The routine stomach wash with milk and eggs was done. Eight ounces of the saturated solution of mag. sulphate was put in the stomach and patient put to bed. Catheterization was done but no urine was obtained. Patient was extremely restless and seemed to be suffering considerable abdominal pain. The following morning consciousness was fully restored. Frequent bloody stools were noted. No urine was voided or obtained by catheter. Hot packs, colonic irrigations, inf. digitalis and olive oil were administered. On the third day after admission the patient voided a small quantity of bloody urine insufficient for examination. Abdominal pain continued requiring morphine. The mucous membrane of the mouth became extremely sore, later gangrenous in type, with necrous

sloughing and hemorrhage. On the fifth day two ounces of urine were obtained. Reports showed evidence of acute parenchymatous nephritis. The urine showed the presence of blood, casts and albumin with a specific gravity of 1010.

The following day the patient refused treatment. Insisted upon getting out of bed. Occasionally small quantities of urine were voided. On the eighth day the kidney function was fairly well established, analysis however showing albumin, casts and blood. The abdominal pain gradually subsided, the stools becoming normal and the mouth healing. On the 19th day the patient refused to remain in the hospital any longer. One week later the patient called at my office appearing none the worse for his experience.

A FRACTURE OF THE HUMERUS, PROBABLY SYPHILITIC IN ORIGIN.

BY CUSTIS LEE HALL, M. D.,
Professor of Orthopaedic Surgery.

The patient was a young colored man, aged twenty-four, who was brought in to the Base Hospital at Camp Sherman, Ohio, with the diagnosis of fracture of the humerus at the juncture of the lower and middle thirds.

The patient stated that on the day of admission, June 8, 1919, while engaged in throwing a baseball to another man about fifty feet away he felt a sudden pain in the right arm, and the arm fell limp to the side and he was unable to use the elbow and hand. There had at no time been any pain or any swelling or any other symptoms associated with the extremity in any way until the throwing of the ball. Patient had been using the arm daily in the camp in his capacity of army cook.

Upon examination the patient was seen to be a rather under-developed colored man, of normal mentality and appearance, fairly good muscular development, and carrying the right arm in a sling. Examination of the arm showed a simple fracture of the lower third of the humerus, with some angulation and some shortening. There was practically no swelling about the upper arm or elbow joint. The arm was put up in a Thomas arm splint in extension, and with traction applied and the patient was quite comfortable. Full supination of the forearm was easily obtained and held to overcome the rotation of the lower fragment.

No pathological condition was suspected until the radiogram was taken the next day, and which showed a large area of diseased bone at the site of the fracture, and which seemed to be very extensive. The type of bone lesion at once made me suspicious of a luetic process, and a Wasserman reaction was done the following day after the radiogram was seen. This proved to be double plus, and active antisyphilitic measures were at once instituted.

The patient gives a negative family history, and stated he was treated for a specific urethritis in 1917 and again in December 1918, at which time he was in the Base Hospital for two months undergoing treatment. He denied the presence of a sore at any time.

A thorough physical examination revealed nothing abnormal, the pupils being equal and reacting to light, the tonsillar structures were not enlarged, the throat was normal in every respect, the knee jerks were active and equal, there was no skin lesion of any kind.

The Von Pirquet test was negative. The leucocyte count and differential showed no abnormality. His weight was 105 pounds which was normal according to the patient.

There was, however a general glandular enlargement, the axillary and epitrochlear glands being the most marked, and the cervical and groin groups were not so marked.

The patient made an uneventful recovery, and the second radiogram showed beginning union of a bony nature, taken about four weeks after the accident. In six weeks the splint was removed and the function of the elbow was gradually resumed under massage and exercises. The antisyphilitic treatment was continued for eight weeks, and the Wasserman reaction was returned as doubtful, but suggestive. He was discharged at the end of three months, with firm union in the humerus, some slight limitation in extension and flexion of the elbow, and the Wasserman reaction was negative.

Before presenting the slides of the radiograms in the case it would be of interest to give a resumé of the chief characteristics of bone syphilis as seen in the various types of cases.

First, the disease may affect all bone and joint structures, and can simulate any of the forms of bone and joint disease.

The chief characteristics are, lime salt deposit beneath the periosteum and loss of bone substance. In considering the hereditary and acquired forms, the early and the late picture must be differentiated. The picture in the shafts of bones and the articular lesions are also different.

1. *Early picture, hereditary form.*

Lime salt deposit beneath the periosteum (fusiform thickening), sometimes with smooth surface line; often irregular and localized, and associated with loss of substance beneath cap of bone. (bone blisters.)

Articular and juxta epiphyseal lesions.

Irregular areas of bone destruction and rarefaction. Occasionally areas of increased density and lime salt deposit beneath the periosteum.

2. *Early picture-acquired form, tertiary lesions, shafts.*

Lime salt deposit beneath the periosteum, usually circumscribed, and localized increase of density. (bone gumma.)

Articular lesions.

Loss of bone substance at edges of articulations (punched out areas). Thickening of soft part structures. Hazy outlines, often without observable bone lesion in symmetrical cases, especially the knees.

Late picture, hereditary form. Shafts.

Sometimes areas of increased density and marked rarefaction, as a diffuse osteomyelitis. Sometimes general lime salt deposit beneath periosteum appearing to thicken the cortex on side of convexity, that is, sabre shaped tibiae.

Articular lesions.

Rarely more than punched out areas and increased density of soft parts. Occasionally much destruction of joint surfaces.

4 *Late picture, acquired form. Shafts.*

Diffuse increase in density, sometimes alternating with lines of greater radiability. (striation.)

Articular lesion.

Localized increase in density, and circumscribed lime salt deposit beneath the periosteum, also associated with tabes, much bone destruction, and irregular masses of calcareous material, detritus. Picture often indistinct because of existing tremor. (Tabetic or Charcot's Joint.)

Differential diagnosis would naturally raise the question of first, tuberculosis, and second, osteomyelitis.

Tuberculosis, in the first place, rarely attacks the shafts of bones, the epiphyses and articular surfaces being the most common seat of the disease, and is typified clinically by soft part thickening, limitation in the motion of the part, accompanied by varying degrees of pain, atrophy of the groups of muscles above and below the joint, local increase of heat, tendency for abscess formation and nearly always, a positive Von Pirquet test. The X-ray picture would give the early picture of increased density of soft parts, squaring and enlargement of the epiphyses, diminution in lime salts, shown by increased radiability of bones, and if the shafts are affected, areas of rarefaction without increase of density of the bone surrounding. The late picture would show irregular or hazy articular surfaces of diminished density with destruction of bone in portions, sometimes circumscribed areas of increased density in soft parts, typical of abscess. Also there would be diminution in diameter of the shaft, and unless the process were healed, diminution in lime salts.

Osteomyelitis, clinically is of rather rapid onset, the pain is more marked, there are more constitutional symptoms, such as elevation of temperature, general malaise, and the usual train of symptoms seen in acute infections of a pyogenic character. From the Roentgen plate we find the osteomyelitic lesion characterized by the following points. Usually the shafts and rarely the joint or epiphyseal structures are involved. Chief characteristics are: one, the circumscribed form, areas of rarefaction in bone shafts with walls of increased density; two, the diffuse form, bone destruction with areas of bone growth.

The early picture often shows nothing abnormal in the Roentgen plate.

Late Picture.

a. Circumscribed form.

Areas of rarefaction (cavities), in the centre of which may be areas of increased density (sequestra) and surrounding which are walls of varying degrees of increased density.

Late Picture—continued.

b. Diffuse form.

Marked irregularity of shaft contour. Irregular lime salt deposit beneath periosteum. If process is active, irregular bony overgrowth and bone destruction with sequestrum formation. If process quiescent, great increase in bone density and increase in diameter of shaft in area affected.

Unusual manifestation.

Lime salt deposit in periosteum without great affection of shafts (periostitis aluminosa).

It will be seen that the late picture of the diffuse form of osteomyelitis is very similar to the late picture in the hereditary form of bone syphilis, and here the clinical history, the laboratory tests and the response to active antisyphilitic measures will aid in the effort to establish a diagnosis.

URETERAL CALCULUS.

BY ALBERT E. PAGAN, M.D.,

Attending Gynecologist, Dispensary, University Hospital.

The frequency of the occurrence of ureteral calculi is not definitely known but is more often than generally supposed. Autopsies show that they occur about twice as often as renal calculi. The frequency with which they are met at autopsy, without a history of symptoms, as compared to the frequency with which gall-bladder and biliary-duct stones, without symptoms, are met, leads us to believe that the renal and ureteral calculi occur many more times without symptoms than the gall stones do.

The stones are usually single, but may be bilateral—varying in size from that of a grain of sand to an inch and a half in diameter—they are usually smooth and of oval shape, often having a longitudinal groove which permits a passage of the urine thru the affected ureter.

The arrest of stones in the ureter most often occurs for anatomic reasons in one of three places; *first*, about two inches below the kidney; *second*, at the brim of the pelvis; *third*, at the vesico-ureteral junction.

The diagnosis of ureteral calculus which is generally not difficult follows.

Stones lodged in the upper third of the ureter cause pain in the lumbar region and loins—at times radiating to the bladder (Penis and testicles in the male). If lodged at the pelvic brim, the pain is less in the back but more in the lower abdomen, sacrum, bladder and genitals and down the inner surface of high. If lodged at the ureteral orifice, the vesical symptoms are prominent, *i. e.*, of tenesmus frequency.

The pain is very severe, often causing prostration, profuse perspiration, vomiting—large doses of opiates are needed to relieve it.

At times the passage of the stone along the ureter may be judged by progress downward of the pain. Uncomplicated cases show very little if any rise of temperature above the normal—the pulse is generally accelerated moderately.

The abdomen is sensitive to deep palpation over the calculus—there is no localized rigidity.

Stones in the lower segment at times may be palpated by the vaginal or rectal route. Stone in the right ureter often must be differentiated from appendicitis or salpingitis. In the former the recognized sequence of symptoms—pain, nausea, vomiting, bowel disturbance, tenderness, rigidity, and leukocytosis are generally elicited, while in the latter the physical findings afford data for diagnosis. In both the urinary findings are generally negative.

Urine during or shortly after an attack shows albumin, blood cells or macroscopic blood-pus—amount of output may be diminished.

When calculus in the ureter is suspected, a ureteral catheterization is indicated—a waxy tipped catheter on removal may show scratches or imprints of a rough stone on its soft tip; the catheter on being passed shows, by its meeting resistance, the probable location of the stone. A functional test should be made. The final diagnosis can nearly always be made by the X-Ray, preferably with a catheter in place to show the location of the stone to be in the ureter; for calcified mesenteric glands and calcified nonabsorbable sutures from a previous operation, as appendectomy, have been mistaken for ureteral calculi.

It is not well to inject the ureter and expect a good plate, for the fluid will often pass the stone and so go on to the pelvis of the kidney, giving a negative plate, save possibly for a dilation above the impacted stone.

TREATMENT.

Many cases are reported as successfully treated by dilating the ureter thru a cystoscope, and the injection of a sterile lubricant, as oil or glycerin. This failing, operation is indicated.

The operative treatment varies of course with the location of the stone; those in the upper third of the ureter are best treated thru the regular loin incision to expose the kidney, the work being done extraperitoneally, if possible. Cases in the lower part of the ureter may be treated by a surapubic incision,

dissecting up the peritoneum and exposing the ureter, or by going thru the peritoneum, as for any other laparotomy.

A few cases are reported where calculi in the lower segment have been removed by the vaginal route.

Nearly all authors agree that it is well to drain these wounds for a short period, 24 to 72 hours, though some say uninfected cases may be closed; but we can never be sure that the urine is not infected. When in doubt, drain.

I have to report a case, which differs slightly from any I have been able to find reported in that I established vaginal drainage, and did a transperitoneal operation for stone in left ureter just below the pelvic brim.

Jan. 1917—Miss L. K., English working-girl, 21 years old—general appearance, healthy and well developed. Family history negative. Past history negative. Had just finished a menstruation—sudden severe pain in L. R. Q., vomiting, recently constipated, leukocytes 9,500, temperature 99.2 degrees "F" urine normal; routine examination. Patient states that she has had four previous attacks of severe pain in lower abdomen, generally during or after menstruation—pain most severe on right side generally, but has also had severe left-sided pain. Previous attacks relieved by electrical treatments and medicine by mouth. *Examination.*—Right abdomen seemed slightly rigid, quite sensitive to deep pressure at McBurney's point. Bimanual, one finger admitted, vagina, long and small, cervix long and conical, points in axis of vagina, left appendage seemed enlarged and sensitive, prolapsed and moderately fixed; otherwise negative.

Operation January 19, 1917.

Cervix dilated, Tr. of Iodine injected into uterus, med. rt. rectus suprapubic incision; left ovary enlarged and cystic prolapsed resected, and attached to lateral wall of pelvis; appendix $3\frac{1}{2}$ inches long, and retrocecal, moderately inflamed; a thick peritoneal membrane covering about 4 inches of anterior surface of lower end of ascending colon passing down and outward attached to parietal peritoneum was clamped, cut, and edges sutured; abdomen closed. Recovery uneventful till twelfth day when patient had suddenly at night, a severe attack of pain.

L. L. Q. radiating to inner side of left thigh, and associated with dysuria-tenesmus, no fever, pulse 90, patient suffering and very nervous. One-sixth grain of heroin gave moderate relief and attack gradually subsided. Urinalysis of specimen passed next morning showed few red cells, occasional pus cell, and slight trace of albumin. Patient discharged from hospital and seemed well for about seven weeks. When I was called patient had just finished a menstruation; sudden severe pain lower abdomen, most severe on left side, radiates down inner side of left thigh, being continuous with intermittent severe exacerbations; temperature normal, pulse 94, pupils dilated.

Examination.—Abdomen soft, but patient resents pressure over entire lower third—bimanual negative; Catheter passed, genitals not inflamed but urethra seems unduly sensitive; specimen obtained showed few reds, occasional white, and slight trace of albumin.

Dr. Dan Borden performed a cystoscopic examination, and ureteral catheterization; the catheter on right side passed unobstructed to the kidney. On the left side an obstruction was met about $2\frac{1}{4}$ inches from the ureteral orifice. Dr. Abbe made X-Ray plates, one of which showed a distinct shadow at or about the point the catheter was stopped.

Operation March 26, 1917.

Posterior colpotomy released small amount of clear serous fluid from peritoneal cavity; a large caliber double T rubber tube drain was placed. Median suprapubic incision, moderate Trendelenburg-leftureter was found, peritoneum opened; a stone about the size of a small pea palpated, just below brim of pelvis. A longitudinal incision was made about $\frac{1}{4}$ inch above stone, fine hemostatic forceps passed in, grasping the stone in an attempt to extract it; it was crushed, and removed in small particles. A size 14 French sound passed down and up the ureter, meeting no resistance; the ureter was closed with two layers of No. O chromic gut, peritoneum over ureter not closed, abdomen closed. Recovery uneventful; rubber tube removed from vagina on fourth day.

A recent communication from the patient says she has been free from any further attacks to date.

INTERSTITIAL KERATITIS.

By E. G. SEIBERT, M.D.,

Clinical Instructor in Laryngology and Ophthalmology.

Interstitial keratitis has been one of the bugbears of ophthalmology. Persistence and recurrence has characterized this disease. Of syphilitic origin it has, prior to the use of salvarsan, been the most resistant to the mercurials of any of the various luetic manifestations.

In 1915 the writer instituted the practice of the local use of salvarsanised serum in the treatment of ocular syphilis by sub-conjunctival injection and, in keratitis, by dropping the serum in the conjunctival sac. The practice has proven itself to be wholly dependable.

Noguchi has shown that the spirochaete shows itself in several different strains, certain ones of which show a selective action in their location. For example one strain injected into the testicle of the rabbit showed its manifestations in the cornea in the form of interstitial keratitis.

By its location in the intracellular spaces of the cornea, the action of systemic remedies has been of little or slow effect upon the spirochaete and consideration of this fact led the writer to the employment of salvarsanised serum locally, after the principle of the Swift-Ellis treatment and the well established demonstrations of Ehrlich and others of the destructive action of this serum on the spirochaete.

The case presented this evening was first seen in the George Washington Dispensary service in Feb'y, '17. At that time there was marked opacity of both corneae so that vision was limited to light perception only. With a four plus Wasserman the patient was given two doses of .1 gm. salvarsan at usual intervals. Atropin and hot compresses were used on the eyes. After three or four weeks with no apparent improvement some salvarsanised serum was procured and several sub-conjunctival injections of 1 cc. each given, after which the serum was given the mother, by whom it was dropped into the conjunctival sac three times daily. This was continued until the early part of

May, by which time all inflammatory reaction had disappeared. Injections of mercury salicylate with two injections of neo-salvarsan completed the anti-syphilitic treatment. At this time the corneae were fairly opaque, white and vision low but better than when first seen. A 5 percent Dionin solution was then given for continuous use twice daily, with hot compresses.

The writer entering the military service early in the summer of '17, the case was not again seen until in March, 1919. By this time the corneae of the left eye had cleared completely, the right showed a faint haze on oblique illumination. The dionin was continued and is still being used to dispel this faint haze. The prognosis is one of complete recovery of vision.

NOTE.—This patient was seen in July, 1920, and discharged.

Both corneae are completely clear, not even a faint haze being detected by oblique illumination, vision 20/30 in each eye which may be improved by a glass.

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VOLUME XIX

NUMBER 4

George Washington University Bulletin

REPORT OF THE TREASURER

1919-1920



PUBLISHED BY THE UNIVERSITY
WASHINGTON, D. C.

George Washington University Bulletin

REPORT OF THE TREASURER
for the year ended August 31, 1920

Volume XIX, Number 4
December, 1920

PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C.
MARCH, JUNE, OCTOBER AND DECEMBER

Entered October 6, 1904, at Washington, D. C., as second class matter
under Act of Congress of July 16, 1894.

George Washington & Friends
Baltimore

George Washington & Friends
Baltimore

George Washington & Friends
Baltimore

George Washington & Friends
Baltimore

George Washington & Friends
Baltimore

Report of the Treasurer.

October 27, 1920.

THE BOARD OF TRUSTEES OF GEORGE WASHINGTON UNIVERSITY:

GENTLEMEN: I have the honor to submit herewith a report showing in detail the financial operations of the University for the fiscal year ended August 31, 1920; and exhibiting the state of the Trust Funds, as required by the By-Laws of the University, certified by The American Audit Company of New York.

The total net Resources of the University are \$935,152.74, a gain for the year of \$111,391.92, as shown in the following comparative summary of Assets and Liabilities for 1918-19 and 1919-20:

COMPARATIVE SUMMARY OF ASSETS AND LIABILITIES, 1918-19 AND 1919-20

<i>Assets.</i>					
	1918-19	1919-20	Increase.	Decrease.	Net increase.
Cash, general funds..	\$6,796.32	\$23,436.32	\$16,640.00		
Cash, Endowment Income.....	9,950.78	7,430.58		2,520.20	
Trust Funds.....	505,197.45	498,306.97		6,890.48	
Plant used for Education.....	527,584.83	733,852.16	206,267.33		
Library Books.....	46,782.02	48,493.87	1,711.85		
Accounts receivable..	12,222.08	30,502.24	18,280.16		
Perpetual insurance deposits.....	1,406.25	1,406.25			
Equipment.....	100,374.07	102,557.33	2,183.26		
	<u>\$1,210,313.80</u>	<u>\$1,445,985.72</u>	<u>\$245,082.60</u>	<u>\$9,410.68</u>	<u>\$235,671.92</u>
<i>Liabilities.</i>					
Notes, secured by Deeds of Trust...	\$19,995.50	\$149,563.50	\$129,568.00		
Notes, unsecured....	12,000.00			\$12,000.00	
Liability to Endowment Funds.....	352,928.81	352,928.81			
Accrued expenses, not due.....	1,628.67	5,625.51	3,996.84		
Reserve, War Dept., Chem. Research...		1,465.17	1,465.17		
Reserve, Student Activities.....		700.00	700.00		
Accounts payable....		549.99	549.99		
	<u>\$386,552.98</u>	<u>\$510,832.98</u>	<u>\$136,280.00</u>	<u>\$12,000.00</u>	<u>\$124,280.00</u>
Total net resources.....	<u>\$823,760.82</u>	<u>\$935,152.74</u>			<u>\$111,391.92</u>

Trust Funds were received amounting to \$6,918.88 as follows: Nellie Maynard Knapp Scholarship Fund \$2,000.00; Endowment Restoration and Accretion Fund \$93.88; Founders of Columbian Women Scholarship Fund \$1,800.00; Byron Andrews Memorial Scholarship Fund \$3,000.00; Alumni Endowment Fund \$25.00. *Executory Trust Funds* were increased by gifts

and added income \$5,666.94 and decreased by the execution of trusts \$19,476.30; a net decrease of \$13,809.36. *Trust Funds and Executory Trust Funds* aggregate \$498,306.97.

Four New Trust Funds were opened during the year and the following amounts received, all of which are included in the preceding paragraph: Founders of Columbian Women Scholarship Fund \$1,800.00; Byron Andrews Memorial Scholarship Fund \$3,000.00; Alumni Endowment Fund \$25.00; and, Chemical Laboratory Building Fund \$115.00.

Real Estate used for educational purposes or acquired for building sites is valued at \$733,852.16, an increase of \$206,267.33. This increase is made up as follows: Lots on Twenty-first street \$8,029.19, partly improved; Lots on Twentieth street \$29,042.45, improved; Payments on account of Law School, 1435 K Street \$161,195.69; Pharmacy building \$8,000.00.

The Mortgage Debt stands at \$149,563.50, an increase of \$129,568.00. This increase is analyzed as follows: Deeds of Trust given as partial payment on Law School building \$120,000.00; on Twentieth street property \$14,500.00; and Deed of Trust on Pharmacy building \$8,000.00. Total \$142,500.00. Reductions during the year: Mortgage on 2017 G Street paid \$5,000.00; mortgage on 2023 G Street paid \$7,500.00; mortgage on 1300 L Street reduced \$432.00. Total reduction \$12,932.00.

Laboratory Equipment and Furniture are valued, after writing off the usual depreciation, at \$102,557.33, an increase of \$2,183.26.

Books in the Libraries are valued, after writing off the usual depreciation, at \$48,493.87, an increase of \$1,711.85.

Contributions, other than those reported under Trust Funds, were received and disbursed as intended by the donors:

Gift of Abram Lisner, a trustee of the University, \$24,500.00, used in clearing the G Street property of debt.

Gifts by members of the Board of Trustees to the Hospital Improvement Fund, \$1,072.00, which, with \$300.00 received from the same source, in 1918-19, was used for the improvement of the sanitary conditions at the University Hospital.

Gifts from various donors for special lectures \$496.00; for books \$50.00; for special hospital supplies \$100.00; to aid in the restoration of the University of Louvain \$255.00; for prizes \$560.00.

Property Under Lease for educational purposes:

2022 G Street, one year ending September 30, 1921, at \$1,500.00 a year.

2024 G Street, two years ending October 1, 1921, at \$1,200.00 a year.

Basement of Concordia Church, eight months, in 1920-21, at \$75.00 a month.

Cash Receipts and Disbursements:

Balance brought over from 1918-19.....	\$5,671.32	
Receipts for the year 1919-20.....	494,641.02	
		\$500,312.34
Disbursements for the year 1919-20.....	478,401.02	
		<hr/>

Balance on hand August 31, 1920..... \$21,911.32

A statement in detail of the Cash Receipts and Disbursements will be found in Exhibit "M" of this report.

Respectfully submitted,

CHARLES W. HOLMES,
Treasurer.

Report of the American Audit Company.

October 27, 1920.

We have examined the accounts and records of the GEORGE WASHINGTON UNIVERSITY for the year ended August 31, 1920, and submit our report, including Exhibits, as follows:

EXHIBIT "A"—Balance Sheet,

As at August 31, 1920.

"B"—General Surplus,

As at August 31, 1920.

"C"—Medical Department Surplus,

As at August 31, 1920.

"D"—Law School Surplus,

As at August 31, 1920.

"E"—Revenue Account,

For the year ended August 31, 1920.

"F"—Department of Arts and Sciences,

For the year ended August 31, 1920.

"G"—Department of Arts and Sciences Summer School,

For the year ended August 31, 1920.

"H"—Law School,

For the year ended August 31, 1920.

"I"—Law Summer School,

For the year ended August 31, 1920.

"J"—Medical and Dental Schools,

For the year ended August 31, 1920.

"K"—University Hospital,

For the year ended August 31, 1920.

"L"—College of Pharmacy,

For the year ended August 31, 1920.

"M"—Statement of Cash Receipts and Payments,

For the year ended August 31, 1920.

"N"—Trust Funds,

As at August 31, 1920.

"O"—Endowment Funds Investments,

As at August 31, 1920.

"P"—Executory Trust Funds Investments,

As at August 31, 1920.

"Q"—Endowment and Executory Trust Funds, Income and Expense,

For the year ended August 31, 1920.

CASH: \$23,436.32.

We counted the cash on hand October 1, 1920, and reconciled the Cash Account with the Bank Accounts as at August 31, 1920.

ACCOUNTS RECEIVABLE: \$30,502.24.

This amount consists of Fees, etc., due for the term of 1919-1920 from students in the various departments, and other Accounts Receivable, as follows:

School of Graduate Studies.....	\$731.25	
Columbian College.....	9,743.13	
College of Engineering.....	3,340.39	
Teachers College.....	653.50	
Summer School.....	4,109.47	
Total Department of Arts and Sciences.....	\$18,577.74	
Law School.....	6,781.25	
Law Summer School.....	161.75	
		6,943.00
Medical School.....	176.30	
Dental School.....	154.56	
		330.86
Accounts due University Hospital from patients for the year 1919-1920.....		2,898.64
District Title Insurance Co.....		22.05
Income from Endowments, available but not transferred to University Account as at August 31, 1920.....		1,729.95
		<u>\$30,502.24</u>

The balances standing in accounts due at September 1, 1919, remaining unpaid as at August 31, 1920, are considered worthless, and were charged against the respective Surplus Accounts.

DEPRECIATION:

Depreciation on the Library Books and Equipment was charged off to the amount on \$2,195.09.

NET INCOME:

The Net Income for the year from all departments, exclusive of the University Hospital, was \$72,877.94, as shown by Exhibit "E."

GENERAL SURPLUS: \$421,012.96.

The changes in this account since August 31, 1919, are shown by Exhibit "B."

MEDICAL DEPARTMENT SURPLUS:

This account was balanced at August 31, 1920, as shown by Exhibit "C."

LAW SCHOOL SURPLUS: \$8,402.23.

This account represents the Law School Surplus as at August 31, 1920, as shown by Exhibit "D."

AUDITOR'S REPORT

7

TRUST FUNDS:

On October 26, 1920 we inspected the securities representing the investments of the Endowment and Executory Trust Funds, in stocks, bonds and notes, as per Exhibits "O" and "P."

We verified the cash balances as at August 31, 1920, representing uninvested principal \$19,871.15, and unexpended Income \$7,430.59 of the Endowment and Executory Trust Funds with the bank accounts.

Respectfully submitted,

THE AMERICAN AUDIT COMPANY,

By C. R. CRANMER,

Resident Manager

Approved:

HARRY M. RICE, *Vice President.*

Attest:

M. PICKETT, *Ass't Secretary.*

GENERAL ACCOUNTS

EXHIBIT "A."
BALANCE SHEET.
As at August 31, 1920.

<i>Assets.</i>		<i>Liabilities.</i>	
<i>Cash:</i>		<i>Trust Notes:</i>	
In Bank.....	\$21,911.32	Notes Secured by Deeds of Trust on:	
Petty Cash Funds.....	1,525.00	1435 K Street N. W.....	\$120,000.00
		720 20th Street N. W.....	4,000.00
Accounts Receivable:		722-728 20th Street N. W.....	10,500.00
Students Ledger, 1919-1920.....	25,851.60	808 Eye Street N. W.....	8,000.00
Hospital Accounts, 1919-1920....	2,898.64	1016 13th Street N. W.....	4,500.00
District Title Insurance Co.....	22.05	1300 L St. N. W.....	2,563.50
Endowment Income Receivable..	1,729.95		
		Accounts Payable (Current).....	149,563.50
<i>Insurance:</i>		Accrued Salaries, Summer School.....	549.99
Withdrawal value of Perpetual In-		Interest Payable.....	2,941.77
surance Policies.....	1,406.25	War Department Chemical Research.....	2,683.74
		Student Activities.....	1,465.17
<i>Libraries—Books:</i>		Liability to Endowment Funds:	700.00
Alumni Catalogues.....	70.00	Secured by Deed of Trust, dated	
Arts and Sciences.....	29,135.67	Dec. 1, 1910 on Medical and	
Law School.....	18,633.68	Hospital Lands and Buildings,	
Medical School.....	4,837.76	1335, 1339 and 1341 H Street	
		N. W.....	321,430.23
Less Depreciation.....	52,677.11	Liability of the University General	
	4,183.24	Property:	
		To Denman Fund.....	7,179.32
<i>Equipment:</i>		To Specific Endowment Funds In-	
Arts and Sciences.....	48,758.96	come, which was applied to cur-	
Law School.....	3,958.78	rent expenses prior to August 31,	
Medical School.....	30,021.10	1910.....	24,319.26
University Hospital.....	30,968.33		
		Surplus:	
Less Depreciation.....	113,707.17	General (Exhibit "B").....	421,012.96
	11,149.84	Law (Exhibit "D").....	8,402.23
			31,498.58
<i>Real Estate:</i>			429,415.19
Medical and Hospital Lands and			
Buildings, 1335, 1339 and 1341 H			
Street N. W.....	403,599.93		

GENERAL ACCOUNTS

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18,218.03

2017 G Street N. W.....
 2023 G Street N. W., including
 three lots adjoining Engineering
 Laboratory Building.....
 2025 G Street N. W.....
 2027 G Street N. W.....
 2101 G Street N. W.....
 2105 G Street N. W.....
 1016 13th Street and 1300 L Street
 N. W.....
 Lots E and F, Square 102.....
 Lot 10, Square 102.....
 Lot D, Square 102.....
 Lots 35 to 38, Square 102.....
 Lot G, Square 102.....
 1435 K Street N. W.....
 808 Eye Street N. W.....

\$733,852.16

\$940,248.17

\$940,248.17

Trust Funds and Investments.

Trust Fund Investments:

Endowment Funds, Exhibit "O".....
 Executory Trust Funds, Exhibit
 "P".....

\$456,632.75
 21,803.07

Trust Funds, Exhibit "N":

Endowment Funds.....
 Executory Trust Funds.....

\$460,168.99
 38,137.98

498,306.97

Cash on Hand, for Investment, Aug.
 31, 1920:

\$478,435.82

Endowment Funds.....
 Executory Trust Funds.....

3,536.24
 16,334.91

19,871.15

\$498,306.97

\$498,306.97

NOTE:

Surplus General Property.....
 Trust Funds.....
 Unexpended Trust Funds Incr me.....

\$429,415.19
 498,306.97
 7,430.58

Total Net Resources.....

\$935,152.74

REPORT OF THE TREASURER

EXHIBIT "B."
GENERAL SURPLUS
As at August 31, 1920.

Balance September 1, 1919.....	\$293,551.69
<i>Add:</i>	
Old Accounts Collected.....	549.92
Old Checks unrepresented.....	225.21
Transfer from Mechanical Engineering Laboratory Fund.....	275.00
Transfer from Law School Surplus.....	20,195.69
Transfer from Trust Funds.....	21,000.00
Contribution from Abram Lisner.....	24,500.00
Property received from National College of Pharmacy.....	\$8,000.00
<i>Deduct:</i>	
Note and Interest paid for National College of Pharmacy.....	4,021.33
	3,978.67
Net Deficit Medical and Dental Schools for the year ended August 31, 1920, transferred to Medical Department Surplus, Exhibit "C".....	15,110.71
Net Income for University for the year ended August 31, 1920, transferred from Revenue Account, Exhibit "E".....	72,877.94
	\$452,264.83
<i>Less:</i>	
Uncollectible Accounts prior years.....	2,774.60
Adjustment Fees Net.....	519.14
Net Income Law School for year ended August 31, 1920, transferred to Law School Surplus Exhibit "D".....	20,773.97
Transferred to Medical Department Surplus, Exhibit "C".....	7,184.16
	31,251.87
Balance, August 31, 1920.....	<u>\$421,012.96</u>

EXHIBIT "C."
MEDICAL DEPARTMENT SURPLUS
As at August 31, 1920.

Balance September 1, 1919.....	\$5,880.90
<i>Add:</i>	
Net Income University Hospital for the year ended Au- gust 31, 1920 (Exhibit "K").....	3,948.69
Transferred from General Surplus.....	7,184.16
	\$17,013.75
<i>Less:</i>	
Uncollectible Accounts—prior years:	
Medical and Dental Schools.....	\$893.60
University Hospital.....	975.25
Fees.....	34.19
Net Deficit Medical and Dental Schools for the year ended August 31, 1920 (Exhibits "E" and "J").....	15,110.71
	<u>\$17,013.75</u>

GENERAL ACCOUNTS

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EXHIBIT "D."
LAW SCHOOL SURPLUS.
As at August 31, 1920.

Balance September 1, 1919..... \$9,180.00

Add:

Net Income Law School for year ended August 31, 1920
(Exhibit "H")..... 20,773.97
\$29,953.97

Less:

Uncollectible Accounts 1918-1919.....\$1,356.05
Appropriated to apply on purchase
1435 K St. N.W.....20,195.69
21,551.74

Balance August 31, 1920..... \$8,402.23

University Hall:

Wages.....	\$5,498.89	
Rent.....	1,675.00	
Heat and Light.....	4,366.99	
Repairs.....	1,916.01	
Hauling.....	220.00	
Insurance.....	276.04	
Supplies and Expense.....	1,313.95	
	<u>\$15,266.88</u>	
	102,342.89	
Transferred to General Fund.....	51,009.42	
	<u>\$153,352.31</u>	
		41,829.05
Net Income Department of Arts and Sciences Summer School transferred from Exhibit "G".....		1,119.84
Net Income transferred to Revenue Account (Exhibit "E")..		<u>\$42,948.89</u>

NOTE:

Library Books were purchased during the year to the amount of \$985.53

NOTE:

Tuition was provided by the Department of Arts and Sciences, for which it received no monetary consideration as follows:

Scholarships.....	\$4,729.00	
University Aid.....	1,111.00	
Ministerial Aid.....	1,093.50	
	<u>\$6,933.50</u>	

EXHIBIT "G."

DEPARTMENT OF ARTS AND SCIENCES SUMMER SCHOOL

For the year ended August 31, 1920.

Income.

Tuition.....	\$22,866.25	
Laboratories.....	726.11	
	<u>\$23,592.36</u>	

Expenses.

Salaries.....	\$18,866.28	
Miscellaneous.....	122.77	
	<u>\$18,989.05</u>	
Transferred to General Fund.....	\$3,483.47	
	<u>22,472.52</u>	
Net Income, transferred to Department of Arts and Sciences (Exhibit "F").....		<u>\$1,119.84</u>

GENERAL ACCOUNTS

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EXHIBIT "H."

LAW SCHOOL

For the year ended August 31, 1920.

Income.

Tuition.....	\$73,676.75	
Matriculation.....	2,295.00	
Library.....	393.50	
Contribution for Admiralty Prizes.....	260.00	
Contribution for Herrick Prize.....	25.00	
Contribution for Ellsworth Prize.....	25.00	
		<u>\$76,675.25</u>

Expenses.

Salaries.....	\$31,423.09	
Stationery and Printing.....	1,012.19	
Telephone.....	153.60	
Postage.....	165.00	
Advertising.....	538.18	
Phi Delta Phi Prize.....	25.00	
Admiralty Prizes.....	260.00	
Herrick Prize.....	25.00	
Ellsworth Prize.....	25.00	
Depreciation on Equipment.....	79.17	
Depreciation on Library Books.....	186.33	
Miscellaneous.....	441.31	
Expenses under Special Appropria- tion.....	1,077.84	
	<u>35,411.71</u>	
Transferred to General Fund.....	\$19,436.00	
		<u>\$54,847.71</u>
Law Hall:		
Wages.....	720.00	
Light.....	221.46	
Repairs to Equipment.....	47.75	
Supplies and Expense.....	141.40	
	<u>1,130.61</u>	
		<u>55,978.32</u>
		<u>\$20,696.93</u>
Net Income Law Summer School Transferred from Exhibit "I".....		<u>77.04</u>
Net Income, transferred to Revenue Account (Exhibit "E")		<u>\$20,773.97</u>

NOTE:

Library Books were purchases during the year to the amount of \$1,177.28.

REPORT OF THE TREASURER

EXHIBIT "I."

LAW SUMMER SCHOOL

For the year ended August 31, 1920.

Income.

Tuition.....	\$5,152.00
--------------	------------

Expenses.

Salaries.....	\$4,131.98
Advertising.....	78.03
	<hr/>
	4,210.01
Transferred to General Fund.....	864.95
	<hr/>
	\$5,074.96
Net Income, transferred to Law School (Exhibit "H").....	<hr/>
	\$77.04
	<hr/>

GENERAL ACCOUNTS

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EXHIBIT "J."

MEDICAL AND DENTAL SCHOOLS.

For the year ended August 31, 1920.

Income.

Medical School:	
Tuition.....	\$19,625.86
Matriculation.....	345.00
Laboratory.....	844.78
Library.....	69.00
Rent of Microscopes.....	144.00
Miscellaneous.....	332.46
	<hr/>
	\$21,361.10
Dental School:	
Tuition.....	9,748.75
Matriculation.....	193.00
Infirmary.....	4,960.78
Sale of Dental Supplies.....	208.70
Miscellaneous.....	541.53
	<hr/>
	\$16,152.76
	<hr/>
	<u>\$37,513.86</u>

Expenses.

Salaries.....	\$34,050.15
Laboratory.....	3,434.80
Infirmary.....	3,739.35
Stationery and Printing.....	1,017.69
Advertising.....	152.33
Telephone.....	290.98
Postage.....	89.23
Traveling Expense.....	266.36
Insurance.....	1,037.58
Depreciation on Equipment.....	621.06
Depreciation on Library Books....	48.37
Miscellaneous.....	542.09
	<hr/>
	\$45,289.99
Medical Hall:	
Wages.....	2,003.97
Heat and Light.....	3,204.66
Hauling.....	142.00
Repairs.....	946.13
Supplies and Expense.....	1,037.82
	<hr/>
	\$7,334.58
	<hr/>
	<u>\$52,624.57</u>

Net Deficit, Medical and Dental Schools transferred to Revenue Account (Exhibit "E")..... \$15,110.71

NOTE:

Library Books were purchased during the year to the amount of \$93.09.

REPORT OF THE TREASURER

EXHIBIT "K."

UNIVERSITY HOSPITAL.

For the year ended August 31, 1920.

Income.

Pay Patients:	
Collected.....	\$98,092.55
Uncollected.....	2,898.64
Donation from Freda Kuhblank.....	100.00
	<hr/>
	\$101,091.19

Expenses.

Salaries.....	31,561.66
Table Supplies.....	33,318.22
Medical and Surgical Supplies.....	7,295.52
Electricity and Gas.....	3,516.47
Fuel.....	3,362.00
Laundry.....	2,994.43
Repairs.....	4,958.83
Miscellaneous Supplies.....	4,343.34
Ice.....	1,671.82
Telephone.....	739.87
Stationery and Printing.....	955.47
Insurance.....	748.18
Interest.....	462.50
Hauling.....	221.00
Miscellaneous.....	993.19
	<hr/>
	97,142.50
Net Income, transferred to Medical Department	
Surplus (Exhibit "C").....	<hr/>
	\$3,948.69

EXHIBIT "L."

COLLEGE OF PHARMACY.

For the year ended August 31, 1920.

Income.

Tuition.....	\$1,280.00
Matriculation.....	35.00
Laboratory.....	176.70
	<hr/>
	\$1,491.70

Expenses.

Salaries.....	1,467.33
Telephone.....	35.18
Heat and Light.....	240.05
Supplies.....	159.23
Repairs.....	562.15
Miscellaneous.....	492.69
	<hr/>
	2,956.63
Deficit, transferred to Revenue Account, (Exhibit	
"E").....	<hr/>
	\$1,464.93

EXHIBIT "M."
STATEMENT OF CASH RECEIPTS AND PAYMENTS.
For the year ended August 31, 1920.

Receipts.	Arts and Sciences and Administra- tion.	Law.	Medical and Dental.	Hospital.	Pharmacy.	Total.
From Students:						
Graduate.....	\$13,888.71					
Columbian College.....	108,976.43					
Engineering.....	42,203.09					
Teachers College.....	17,435.75					
Law.....		\$70,340.60				\$314,051.92
Medical.....			\$21,579.12			
Dental.....			10,526.53			
Pharmacy.....					\$1,027.73	
Summer Session.....	20,294.71	4,909.25				
Graduation fees.....	2,870.00					
University Hospital.....				\$98,374.24		98,374.24
Dental Infirmary.....			4,954.78			4,954.78
Contributions:						
Abram Lisner.....	24,500.00					
Special lectures.....	496.00					
Books.....	50.00					
Special supplies.....				100.00		
Louvain.....	255.00					
Prizes.....	100.00	460.00				
Student fees, 1918-19.....	3,104.08	278.50	917.81			4,300.39

REPORT OF THE TREASURER

EXHIBIT "M"—Continued.
STATEMENT OF CASH RECEIPTS AND PAYMENTS.
For the year ended August 31, 1920.

Receipts.	Arts and Sciences and Administration.	Law.	Medical and Dental.	Hospital	Pharmacy.	Total.
Rent, Fraternity rooms.....	423.00					423.00
Real Estate rents.....	541.00					541.00
Endowment income.....	1,674.73					1,674.73
Special Examination.....			111.15			111.15
Student Activities.....	7,244.25					7,244.25
Interest on bank balances.....	1,018.92					1,018.92
M. E. Lab. fund to Gen'l a/c.....	275.00					275.00
War Dept. Chem. Research.....	5,000.00					5,000.00
Sale of Dental property.....	1,032.00		708.70			1,740.70
Law transfer for 1435 K.....	20,195.69					20,195.69
Proceeds trust, 808 I Street.....					7,869.50	7,869.50
Miscellaneous.....	904.75					904.75
Adm. transfer from law.....	272,483.11	75,988.35	38,798.09	98,474.24	8,897.23	494,641.02
	19,436.00					19,436.00
Total receipts.....	\$291,919.11	\$75,988.35	\$38,798.09	\$98,474.24	\$8,897.23	\$514,077.02
Cash balances Sept. 1, 1919.....		7,147.58				5,671.32
Cash overdraft Sept. 1, 1919.....	1,476.26					
	\$290,442.85	\$83,135.93	\$38,798.09	\$98,474.24	\$8,897.23	\$519,748.34

GENERAL ACCOUNTS

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Payments.	Arts and Sciences and Administra- tion.	Law.	Medical and Dental.	Hospital.	Pharmacy.	Totals.
Regular Departmental.....	\$103,297.46	\$39,207.17	\$42,322.00		\$6,936.46	\$191,763.09
University Hospital.....				\$97,913.59		97,913.59
Dental Infirmary.....	2,352.76	256.00	2,827.67			2,827.67
Refunds to students.....	16,882.10	1,380.61	994.27			3,603.03
Maintenance of buildings.....	35,813.21		6,834.68			25,097.39
General Expenses.....	6,937.70					35,813.21
Stationery and printing.....	1,238.72					6,927.70
Advertising.....	1,012.76					1,238.72
Postage.....	1,440.28					1,012.76
Interest.....	4,397.46					1,440.28
Commencements.....	2,796.56					4,397.46
Equipment.....	985.53	601.22	307.36			4,018.59
Library Books.....	42,724.88	1,177.28	93.09	313.45		2,255.90
Real Estate.....	24,500.00					42,724.88
Notes paid.....						24,500.00
Nurses Home note reduced.....						385.00
Taxes.....						302.85
War Dept., Chem. Research.....						3,534.83
Petty Cash.....		75.00				400.00
1919 Summer Salaries.....		128.74				900.63
Refund, 1917-18 breakage.....			5.75			5.75
To G. E. for purchase 1435 K.....		20,195.69				20,195.69
Student Activities.....	7,132.00					7,132.00
Administration transf. to G. E.....	256,830.99	63,021.71	53,384.82	98,227.04	6,936.46	478,401.02
		19,436.00				19,436.00
Total payments.....	\$256,830.99	\$82,457.71	\$53,384.82	\$98,227.04	\$6,936.46	\$497,837.02
Cash balances, Aug. 31, 1920.....	33,611.86	678.22	14,586.73	247.20	1,960.77	21,911.32
Cash overdrafts, Aug. 31, 1920.....						
	\$290,442.85	\$83,135.93	\$38,798.09	\$98,474.24	\$8,897.23	\$519,748.34

TRUST ACCOUNTS

REPORT OF THE TREASURER

EXHIBIT "N."

TRUST FUNDS.

As at August 31, 1920.

GENERAL ENDOWMENT FUNDS.

Permanent funds, principal to be invested and income only to be used, for support of the general work of the University.

Subscription Gifts Endowment Fund, 1845-1851:

Fund raised by authority of the Trustees of Columbian College by general subscription between the years 1845 and 1851, as a permanent endowment for the support of the College. (Formerly called the Poindexter Endowment Fund.)..... \$12,525.56

Withers Endowment Fund:

Fund raised by authority of the Trustees of Columbian College between the years 1851 and 1870, for increasing the endowment fund of the College; John Withers of Alexandria, Virginia, giving \$16,100, and the balance being obtained by general subscription. (Formerly called the Forty Thousand Dollar Endowment Fund).. 26,891.46

Corcoran Endowment Fund:

Fund raised by authority of the Trustees of Columbian College and Columbian University between the years 1871 and 1886, to be forever held inalienable, and not to be diminished by use for the support of the institution, but the whole amount to be invested, in the discretion of the Trustees and according to their best judgment, and the interest thereon, or the income therefrom to be used for the current expenses and support of the institution; William W. Corcoran, of Washington, D. C., giving \$112,000, and the balance being obtained by general subscription (\$189,048.75 of this fund invested in Deed of Trust on Medical and Hospital Lands and Buildings)..... 217,864.92

Syms Endowment Fund:

Bequest of Samuel Robert Syms, of West Hoboken, New Jersey, in 1891, to Columbian University, to be applied by the Trustees toward the endowment of the College proper..... 1,500.00

\$258,781.94

PROFESSORSHIP ENDOWMENT FUNDS.

Permanent funds, principal to be invested and income only to be used, for support of professorships as specified by the donors.

Congressional Professorship Endowment Fund:

Donation by the United States, in 1832, by Act of Congress, of \$25,000 in city lots in Washington, D. C., to be sold and the proceeds invested as a capital, the dividends or interest to be used and applied, in aid of other revenues of Columbian College, to the establishment and endowment of such professorships therein "as now are, or hereafter shall be, established by the Trustees;" (appropriated to the extent of \$6,295.77 by vote of the Board of Trustees to the support of the Professorship of English..... \$91,711.93

Elton Professorship Fund:

Bequest of Rev. Romeo Elton, of Exeter, England, in 1872, to be applied for the foundation of a professorship of mental and moral philosophy in Columbian College, to be called the Elton Professorship of Mental and Moral Philosophy. 14,508.19

Alumni Professorship Fund:

Gifts of various alumni since 1911, for the endowment of an Alumni Professorship of Mathematics, the amount to be invested and the interest only to be used for the professorship. 829.49

\$107,049.61

SPECIFIC ENDOWMENT FUNDS.

Permanent funds, principal to be invested and income only to be used, for designated purposes specified by the donors (other than support of professorships) incidental to, or connected with, the general work of the University.

*Scholarship Funds:**Walker Scholarship Fund:*

Gift of William Walker, of Putnam County, Georgia, in 1824, for the endowment of a scholarship. \$2,500.00

Withington Scholarship Fund:

Gift of the Board of Trustees of the New York Baptist Theological Seminary, on behalf of John Withington of New York, in 1829, for the purpose of endowing a scholarship in Columbian College, to be named the Withington Scholarship. 1,953.13

Morehouse Scholarship Fund:

Gift of A. Morehouse, of Washington, D. C., in 1861, to Columbian College, with the design of adding to its ability to furnish gratuitous instruction to indigent students for the Christian ministry. 1,500.00

Kendall Scholarship Fund:

Gift of Amos Kendall, of Washington, D. C., in 1869, to Columbian College on behalf of Calvary Baptist Church in the City of Washington, to purchase a classical scholarship; the Trustees of Public Schools in the City of Washington, and their successors, to have the perpetual privilege of selecting from said schools one pupil annually to fill said scholarship, and the pupils so selected each to be entitled to instruction in said College, for the term of six years, free of charge for tuition, use of library, and apparatus, or for any other privilege allowed to paying students of the same grade. 5,959.61

Davis Scholarship Fund:

Gift of Isaac Davis, of Worcester, Massachusetts, in 1869, the income to be appropriated to some student pursuing his collegiate course in Columbian College under certain conditions. 1,000.00

M. M. Carter Scholarship Fund:

Gift of Mrs. Maria M. Carter, of Washington, D. C., in 1871, to Columbian College, to found a scholarship for some deserving young man. 1,000.00

Founders of Columbian Women Scholarship Fund:

A fund established by the "Columbian Women" of George Washington University, in 1920, to provide scholarships for women in Columbian College. \$1,800.00

Byron Andrews Memorial Scholarship Fund:

A fund founded by Mrs. Belle Fisk Andrews, in memory of her husband, Byron Andrews, to provide scholarships "for ambitious and needy students, in English, Latin, Journalism, History, Literature or Political Science" . . . 3,000.00

Farnham Scholarship Fund:

Gift of Mrs. Robert Farnham, of Washington, D. C., in 1871, to Columbian College for a scholarship in the College 1,000.00

Powell Scholarship Fund:

Devise of real estate by Rear Admiral Levin M. Powell, of Washington, D. C., in 1886, to Columbian University for the free education of young men by way of preparation for entrance into the Naval Academy at Annapolis, or to fit them to become mates and masters in the Merchant Marine Service of the United States. . . 18,923.00

Mary Lowell Stone Scholarship Fund:

Gift of an anonymous person in memory of Miss Mary Lowell Stone, in 1893, to Columbian University for scholarships for needy women students in science in the Department of Arts and Sciences. 2,000.00

H. H. Carter Scholarship Fund:

Gift of Mrs. Maria M. Carter, of Washington, D. C., in 1896, in memory of her husband, Henry Harding Carter, to Columbian University, as a foundation for scholarships in civil engineering in Columbian College. . . 5,000.00

Nellie Maynard Knapp Scholarship Fund:

Gift of the Columbian Women, in 1915, in memory of Mrs. Nellie Maynard Knapp, to George Washington University, for scholarships for women in the Department of Arts and Sciences. 5,000.00

\$50,635.74

Medical School and Hospital Funds:*Cooper Medical Research Fund:*

Bequest of Mrs. Eleanor J. Cooper, of Washington, D. C., in 1905, to Columbian University on certain terms since modified by the Supreme Court of D. C. as follows: The income to be devoted towards the establishment and maintenance, in connection with the Medical Department of George Washington University, of a Research Laboratory, the work of this laboratory to be devoted to the investigation of the nature, causation, prevention, and cure of malaria and other infectious and contagious diseases. 10,000.00

National Park Seminary Hospital Endowment Fund:

Gift of students of National Park Seminary, of Forest Glen, Maryland, in 1906, to George Washington University, for the endowment of a bed in the University Hospital. 500.00

Woodbury Hospital Endowment Fund:

Bequest of Miss Ellen deQ. Woodbury, of Washington, D. C., in 1909, to George Washington University, for the reception and treatment of female patients in the hospital belonging to or connected with the University..... \$9,583.33

Chapman Hospital Endowment Fund:

Bequest of Mrs. Susanna A. Chapman, of Washington, D. C., in 1911, to George Washington University, to be used for the purposes of the free wards of the University Hospital..... 1,350.90

Tree Hospital Endowment Fund:

Bequest of Lambert M. Tree, of Chicago, Illinois, in 1911, in memory of his mother, Mrs. Laura M. Tree, to Columbian University, for the purpose of establishing one or more beds in perpetuity in the University Hospital to be known as the "Laura M. Tree bed or beds"..... 10,000.00

\$31,434.23

Prize Funds:*Davis Prize Fund:*

Gift of Isaac Davis, of Worcester, Massachusetts, in 1847, to Columbian College, for prizes to be awarded annually to such members of the senior class as shall have made the greatest progress in elocution since their connection with the College..... 700.00

Ruggles Prize Fund:

Gift of William Ruggles, of Washington, D. C. (a professor in Columbian College and at one time Acting President), in 1859, to Columbian College, for a prize to be awarded annually for excellence in mathematics.. 500.00

Staughton-Elton Prize Fund:

Gift of Rev. Romeo Elton, of Exeter, England, in 1860 and 1865, to Columbian College, for prizes to be awarded annually for excellence in the Latin and Greek languages; one to be called the Staughton prize in Latin, the other the Elton prize in Greek..... 500.00

Fitch Prize Fund:

Gift of James E. Fitch, of Washington, D. C., in 1883, to Columbian University in memory of Willie E. Fitch, for a gold prize to be assigned annually under the auspices of the Scientific School..... 1,000.00

Walsh Prize Fund:

Gift of Thomas F. Walsh, of Washington, D. C., in 1901, to Columbian University, for a gold medal to be awarded annually for excellence in Irish history..... 300.00

Cutter Prize Fund:

Gift of Marion Kendall Cutter, of Washington, D. C., in 1902, to Columbian University, in memory of E. K. Cutter, for a prize to be awarded annually for excellence in the study of English..... 1,000.00

Hubbard Prize Fund:

Gift of Mrs. Gertrude M. Hubbard, of Washington, D. C., in 1907, to George Washington University in memory of her husband, Gardiner G. Hubbard, for a prize to be awarded annually to the student in the undergraduate department of the University who, having maintained throughout four years a high standing in the classes of American history, may be required to present the best essay upon an assigned topic in this subject. \$1,000.00

Ordronaux Prize Fund:

Bequest of John Ordronaux, of Glen Head, N. Y., in 1909, to George Washington University, for the establishment of biennial prizes in the Law and Medical Departments. 4,762.50

Sterrett Prize Fund:

Gift of Rev. J. Macbride Sterrett, in 1911, to George Washington University, in memory of his son, J. Macbride Sterrett, Jr., for a gold medal to be awarded annually to the student obtaining highest average in physics. 200.00

\$9,962.50

ENDOWMENT RESTORATION FUND.

Non-permanent fund, principal and income usable for the purposes specified.

Endowment Restoration and Accretion Fund:

A fund created by the Board of Trustees, October 10, 1917, without limitation of time or amount, to provide means for the restoration of principal of Endowment Funds used for current expenses prior to August 31, 1910. After such restoration has been effected from the fund or from any other source, the fund to be called General Endowment Accretion Fund, open and perpetual, the income only to be used for University purposes. \$2,279.97

ALUMNI ENDOWMENT FUND.

Permanent fund, principal to be invested and income to be used, for support of the general work of the University.

Alumni Endowment Fund:

A fund established by the senior class of 1920, as a testimonial of grateful appreciation, to be added to by succeeding graduating classes, the income only to be used for the general welfare of the University, as directed by the Board of Trustees. 25.00

Summary.

General Endowment Funds. \$258,781.94
 Professorship Endowment Funds. 107,049.61

Specific Endowment Funds:

Scholarship Funds. 50,635.74
 Medical School and Hospital Funds. 31,434.23
 Prize Funds. 9,962.50

92,032.47

Endowment Restoration and Accretion Fund. 2,279.97
 Alumni Endowment Fund. 25.00

Total Endowment Funds. \$460,168.99

EXHIBIT "O."
ENDOWMENT FUNDS INVESTMENTS.
As at August 31, 1920.

STOCKS.

American Telephone and Telegraph Co.:	
6 shares of stock.....	\$708.00
Chicago, Rock Island and Pacific Railway Co.:	
40 shares of 7 per cent Preferred Stock.....	4,000.00

BONDS.

Chicago, Rock Island and Pacific Railway Co.:	
\$24,000 4 per cent First and Refunding Mortgage Bonds, due 1934.....	20,959.17
*Chicago, Rock Island and Pacific Railway Co.:	
\$10,000 4 per cent Collateral Trust Bonds, due 2002.....	8,094.72
Virginia Railway Co.:	
\$300 5 per cent First Mortgage Gold Bonds, Series "A," due 1962.....	297.38
Washington Railway and Electric Co.:	
\$4,500 4 per cent Consolidated Mortgage Gold Bonds, due 1951.....	3,631.25
Potomac Electric Power Co.:	
\$15,000 5 per cent Consolidated Mortgage Gold Coupon Bonds, due 1936.....	15,025.00
City of New Brunswick, New Jersey:	
\$3,000 4 per cent Sinking Fund Bonds, due 1922.....	3,000.00
City of Medford, Massachusetts:	
\$3,000 4 per cent Sewerage Loan Bonds, due 1924.....	3,000.00
Liberty Loan Bonds—Second Series.....	2,100.00
Liberty Loan Bonds—Third Series.....	6,300.00
Liberty Loan Bonds—Fourth Series.....	1,950.00

TRUST NOTES.

Thomas R. Marshall Note:	
Secured by deed of trust on part of lot 5, square 253, and lot 70, block 30, in Columbia Heights; interest 5½ per cent; due May 5, 1922.....	5,000.00
Washington Sanitary Improvement Company Notes:	
Secured by deed of trust on lots in squares 509, 552, 615, 617 and 674; interest 6 per cent; due June 9, 1923.....	11,000.00
Agnes Plunkett Note:	
Secured by deed of trust on part of lot 12, square 11, in Meridian Hill; interest 6 per cent; due February 4, 1923	200.00
Arthur T. Ramsey and Judith L. Steele Notes:	
Secured by deed of trust on lots 21, 22, 23 and part of lot 9, block 32, Columbia Heights; interest 6 per cent; due March 20, 1923.....	3,000.00
E. J. W. Revell Notes:	
Five of seven, secured by deed of trust on lot 40, square 44, University Park, interest 6 per cent; due September 9, 1921. Held by American Security and Trust Co., Trustee of Byron Andrews Memorial Scholarship Fund.	3,000.00
Interest in \$350,000 note payable to Washington Loan and Trust Co., Fiscal Agent of George Washington University, Trustee of Endowment Funds, secured by deed of trust, executed by the University to National Savings and Trust Company, Trustee, December 1, 1910, on Medical and Hospital Lands and Buildings; 1335, 1339, and 1341 H Street N. W.; without interest; due on or before Decem- ber 1, 1920.....	323,430.23

* To secure these bonds the University has received 100 shares of Chicago, Rock Island and Pacific Railway Co. common stock.

REAL ESTATE.

Congressional Endowment:

Lot 8, square 13.....	\$2,565.00	
Lot 10, square 13.....	2,218.00	
Lot 12, square 13.....	4,588.00	
Lot 13, square 13.....	3,924.00	
Lot 9, square 16.....	2,224.00	
Lot 8, square 23.....	3,055.00	
Lot 2, square west of 23.....	1,069.00	
Lot 5, square 87.....	1,896.00	
		<u>\$21,539.00</u>
Powell Endowment, 1707 I Street N. W.....		18,923.00
Chapman Endowment, Hyattsville.....		125.00
Corcoran Endowment, sub-lot 148, square 672.....		1,350.00
		<u>\$456,632.75</u>

SUMMARY.

Stocks.....	\$4,708.00	
Bonds.....	64,357.52	
Trust Notes.....	345,630.23	
Real Estate.....	41,937.00	
		<u>456,632.75</u>
Cash on hand for Investment, August 31, 1919, Exhibit "A.".....		3,536.24
Total Endowment Funds, Exhibit "M".....		<u>\$460,168.99</u>

EXHIBIT "P."

EXECUTORY TRUST FUNDS AND INVESTMENTS.

Non-permanent funds, principal and income usable for the purposes specified by the donors, each trust terminating on its execution.

Executory Trust Funds not Confined to Building Purposes:

Denman Law School Fund:

Bequest of Hampton Y. Denman, of Washington, D. C., in 1904, to Columbian University, for the use and benefit of the Law Department.....	\$8,423.67
Interest in General Property of the University.....	\$7,179.32

Rita Weller Note:

Secured by deed of trust on lots 16 to 34 and 36 to 44, square 849; interest 6 per cent; due October 25, 1921.....	1,000.00
Cash.....	244.35

8,423.67

Law School Fund:

Amounts set aside by the Trustees of the University since 1911 for the benefit of the Law School.....	3,607.73
Liberty Loan, First, Converted.....	500.00
Cash.....	3,107.73
	<u>\$3,607.73</u>

Jacques Law School Fund:

Bequest of Mrs. Mary Emma Jacques, of Washington, D. C., in 1912, to George Washington University, to be used in such manner as the Trustees may direct for the Law School. \$4,832.04

Rita Weller Notes:

Secured by deed of trust on lots 16 to 34 and 36 to 44, square 849, interest 6 per cent; due October 25, 1921. 4,000.00
Cash. 832.04
\$4,832.04

Jacques Medical School Fund:

Bequest of Mrs. Mary Emma Jacques, of Washington, D. C., in 1912, to George Washington University, to be used in such manner as the Trustees may direct for the Hospital of the University. 5,126.48

U. S. Steel Corporation:

\$3,000.00 5 per cent Sinking Fund Gold Coupon Bonds, due 1963. 3,060.00

Metropolitan Railroad Co.:

\$1,000.00 5 per cent First Mortgage Gold Bond, due 1925. 1,070.00

Liberty Loan Bonds—Fourth Series. 400.00

Cash. 596.48

\$5,126.48

Mayer Hospital Fund:

Bequest of Theodore J. Mayer, of Washington, D. C., in 1907 (received in 1916), to George Washington University, for the benefit of the University Hospital. 4,336.89

Potomac Electric Power Co.:

\$2,000.00 5 per cent Consolidated Mortgage Gold Coupon Bonds, due 1936. 2,028.75

Washington Gas Light Co.:

\$1,000.00 5 per cent General Mortgage Gold Bond, due 1960. 1,105.00

Liberty Loan Bonds—Fourth Series. 500.00

Cash. 703.14

\$4,336.89

Isabel P. Anderson Fund for Filipino Students:

A fund of \$1,000.00 contributed by Mrs. Larz Anderson for scholarships in George Washington University to Filipino Students. 239.64

Cash unexpended. 239.64

Hospital Improvement Fund:

A fund contributed by the Trustees of the University for the improvement of the sanitary conditions at the University Hospital. 41.92

Cash unexpended. 41.92

\$26,608.37 \$26,608.37

Building Funds:*Law School Building Fund:*

Gifts of various persons towards a fund authorized by the Trustees of the University May 31, 1916, for purchasing a site and erecting a Law School building..		\$2,879.64
Washington Railway and Electric Co.: \$1,000.00 4 per cent Consolidated Mortgage Gold Bond, due 1951.....	860.00	
Cash.....	2,019.64	

\$2,879.64*General Building Fund:*

Gifts of various persons toward a fund authorized by the Trustees of the University May 31, 1916, for purchasing sites, buildings and equipment, remodeling or rebuilding, and paying off obligations. This is an open subscription fund, to be continued and increased indefinitely....		727.97
Liberty Loan Bonds—Fourth Series.....	100.00	
Cash.....	627.97	

\$727.97*Fifty Thousand Dollar Building and Grounds Fund:*

Gifts of various persons toward a fund authorized by the Trustees of the University for purchasing sites and buildings, remodelling or rebuilding, and paying off obligations.....		405.00
Cash.....	405.00	

1919 One Hundred Thousand Dollar Fund:

Gifts of various persons toward a fund authorized by the Trustees of the University, the proceeds, principal and interest, usable for grounds and buildings and for general purposes.....		7,402.00
Cash.....	7,402.00	

Chemistry Building Fund:

Gifts of various persons towards a fund, principal and interest usable for a Chemical Laboratory Building.....		115.00
Cash.....	115.00	

<hr/> \$11,529.61	<hr/> \$11,529.61
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TRUST ACCOUNTS

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SUMMARY.

Principal of Funds.

Funds not confined to building purposes.....	\$26,608.37
Building Funds.....	11,529.61

Investment of Funds.

Bonds.....	\$9,623.75
Trust Notes.....	5,000.00
Deed of Trust.....	7,179.32

	<u>\$21,803.07</u>
Cash.....	16,334.91

<u>\$38,137.98</u>	<u>\$38,137.98</u>
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EXHIBIT "Q."
 ENDOWMENT AND EXECUTORY TRUST FUNDS, INCOME AND EXPENSE.
 For the year ended August 31, 1920.

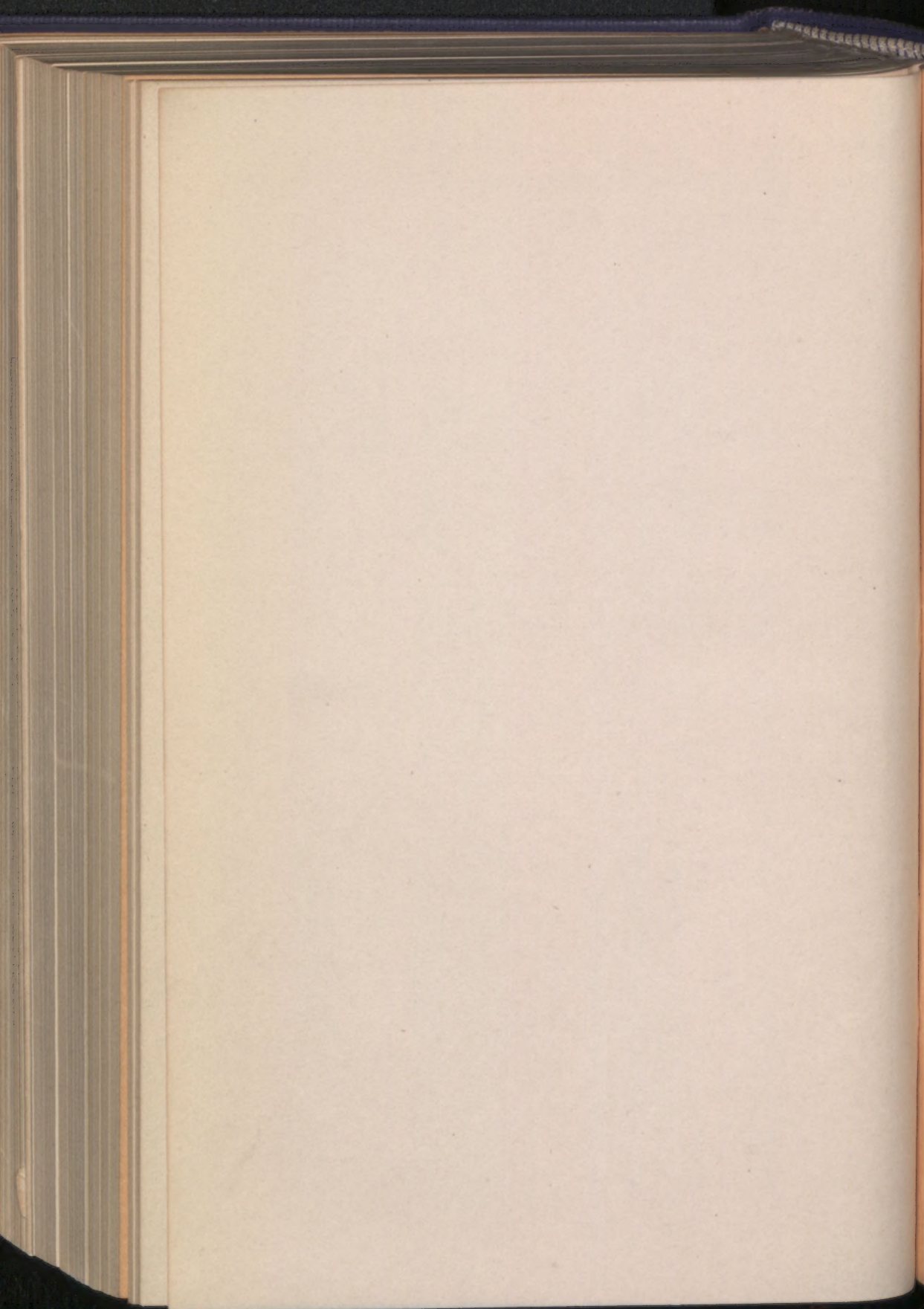
	Balance Aug. 31, 1919.		Year ended Aug. 31, 1920.		Balance Aug. 31, 1920.	
	Debit.	Credit.	Expense.	Income.	Debit.	Credit.
<i>Endowment Funds:</i>						
Congressional Professorship of English Fund.....		\$270.55	\$270.55	\$310.35		\$310.35
Corcoran Endowment Fund.....		1,237.51	1,237.51	1,419.60		1,419.60
Elton Professorship Fund.....		534.03		215.53		749.56
Alumni Professorship of Mathematics Fund.....		69.63		40.85		110.48
Founders of Columbian Women Scholarship Fund.....				1.75		1.75
Withington Scholarship Fund.....		114.09		18.70		132.79
Kendall Scholarship Fund.....		344.04		221.67		103.71
Davis Scholarship Fund.....	\$67.85		462.00		\$65.88	
Powell Scholarship Fund.....		1,015.01	2,361.70	2,000.04		653.35
H. H. Carter Scholarship Fund.....	206.25				206.25	
Byron Andrews Memorial Scholarship Fund.....				86.45		86.45
Nellie Maynard Knapp Scholarship Fund.....		390.88	180.00	147.78		358.65
Cooper Medical Research Fund.....		2,271.17	397.05	492.64		2,368.76
National Park Seminary Hospital Endowment Fund.....		252.27		24.63		276.90
Woodbury Hospital Endowment Fund.....		412.39	807.41	472.10		77.08
Chapman Hospital Endowment Fund.....		149.12	60.56	60.56		60.56
Tree Hospital Endowment Fund.....		429.59	832.54	492.64		89.69
Davis Prize Fund.....		60.48	31.50	34.48		63.46
Ruggles Prize Fund.....	40.50				40.50	
Fitch Prize Fund.....	71.87		50.00	11.62	110.25	
Walsh Prize Fund.....		129.33		14.76		144.09
Cutter Prize Fund.....		84.06	40.00	49.25		93.31
Hubbard Prize Fund.....	6.08		40.00	49.25		3.17
Sterrett Prize Fund.....		46.03		21.35		67.38
Ordronaux Prize Fund.....		137.37	100.00	200.06		237.43

Executory Trust Funds:

Mayer Hospital Fund.....	486.47	657.94	171.47	.....
Denman Law School Fund.....	94.30	180.22	85.92	.....
Law School Fund.....	572.90	1,189.93	587.03	.....
Jacques Law School Fund.....	336.22	664.66	339.06	10.62
Jacques Medical School Fund.....	214.24	359.79	145.55	.....
Law School Building Fund.....	313.58	624.49	310.91	.....
General Building Fund.....	36.61	49.55	12.94	.....
Endowment, Restoration and Accretion Fund.....	93.88	93.88	107.69	.....
Administration Building Fund.....	39.29	.....	39.29	.....
Isabel P. Anderson Fund for Filipino Students.....	8.30	23.14	14.84	.....
1919—One Hundred Thousand Dollar Fund.....	200.00	.....	88.81	.....
Chemistry Building Fund.....	.....	.....	53	288.81
Less Balances.....	\$392.55	\$10,772.98	\$8,252.78	\$422.88
Net Balances.....	.....	.....	.....	.....
		\$2,520.20		\$7,430.58

Summary.

Unexpended Income, Cash on Hand September 1, 1919.....	\$9,950.78
Income for year:	
Endowment Funds.....	\$6,388.03
Executory Trust Funds.....	1,804.75
Total.....	8,252.78
Expenses for the year:	
Endowment Funds.....	6,959.38
Executory Trust Funds.....	3,813.60
Unexpended Income, Cash on Hand August 31, 1920.....	10,772.98
	\$7,430.58



Form of Bequest.

FOR EXECUTORY ENDOWMENTS.

"I give and bequeath to the GEORGE WASHINGTON UNIVERSITY, of Washington, D. C., the sum of.....dollars, free from legacy duty or tax, the same to be used as its Board of Trustees may determine.

FOR GENERAL ENDOWMENTS.

"I give and bequeath to the GEORGE WASHINGTON UNIVERSITY, of Washington, D. C., the sum of.....dollars, free from legacy duty or tax the principal to be invested, and the income only to be used as its Board of Trustees may determine.